DOE/EH-0220

**ENVIRONMENTAL**  **GUIDANCE**



# FEDERAL ENVIRONMENTAL INSPECTIONS HANDBOOK

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENVIRONMENTAL POLICY AND ASSISTANCE
RCRA/CERCLA DIVISION
EH-413

**OCTOBER 1991**
**SUBPART CC UPDATE, AUGUST 1999**

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# PART I

# INTRODUCTION

## Introduction

**Purpose:** This **Federal Environmental Inspection Handbook** has been prepared by the Department of Energy (DOE), Office of Environmental Policy and Assistance RCRA/CERCLA Division (EH-413). It is designed to provide DOE personnel with an easily accessible compilation of the environmental inspection requirements under Federal environmental statutes which may impact DOE operations and activities. DOE personnel are reminded that this Handbook is intended to be used in concert with, and not as a substitute for, the Code of Federal Regulations (CFR), Federal Register (FR), and other applicable regulatory documents.

**Statement of Need:** In the absence of comprehensive guidance identifying pertinent environmental inspection requirements, some DOE facilities which recently have been audited by Tiger Teams were found to have insufficient inspection programs. For example, one site was found to have inadequate inspection of its RCRA-regulated containers and tanks; at another, drums containing hazardous waste were not regularly inspected for leaks or spills; and a third was found to have inadequate inspection of its TSCA-regulated PCB waste storage areas. Facilities which have not yet been audited by Tiger Teams may be found to have similar deficiencies. The use of this Handbook by DOE personnel will aid in the identification and correction of cited inspection deficiencies, and in maintaining compliance at facilities with adequate inspection programs.

**Contents:** This Handbook contains eight chapters addressing:

- The Resource Conservation and Recovery Act **(RCRA);**
- The Comprehensive Environmental Response, Compensation, and Liability Act, **(CERCLA);**
- The Clean Air Act **(CAA);**
- The Atomic Energy Act **(AEA);**
- The Clean Water Act **(CWA);**
- The Safe Drinking Water Act **(SDWA);**
- The Toxic Substances Control Act **(TSCA);** and
- The Federal Insecticide, Fungicide and Rodenticide Act **(FIFRA).**

Each chapter provides an introduction to a particular statute, describes its statutory inspection requirements, and contains the inspection requirements for the regulatory program resulting from the statute. Other information provided in this document includes Appendix A - a listing of Federally-sponsored Hotlines (see “Assistance” below), and Appendix B - a glossary.

**Definition:** The word **"inspection"** in this guidance includes both "self inspections", and inspections which are performed by a regulatory authority, (those inspections performed by the Administrator of the EPA his designee, or representatives of States where appropriate).

Self inspections are usually performed to identify leaks, spills, fugitive emissions, or equipment failures which may result or already have resulted in leaks or spills, and to provide assurance that tanks, liners, etc. have been installed, constructed, or repaired properly. Self inspections most often are regularly scheduled events, unlike monitoring, which is often a continuous process. Self inspections are usually performed by a facility owner or operator, or a qualified employee.

This Handbook does not contain monitoring requirements. However, a few actions which are called "monitoring requirements", but which meet this Handbook's definition of self inspection (because they are scheduled, rather than continuous events), have been included for completeness.

**State Authority:** Inspections may be carried out by a State when that State has authority over a program, or by a Federal Agency when it does not. State programs may be more, but not less, stringent than those prescribed by Federal regulations.

**Assistance:** EH-231 recognizes that because inspection requirements vary widely, implementing an inspection program which responds to all of the mandated requirements demands careful management. DOE staff who require further guidance concerning inspections may contact the Office of Environmental Guidance (EH-22) at (FTS) 896-6374 or (202) 586-6374, or their designated compliance coordinator in the Office of Environmental Compliance at (FTS) 896-2113 or (202) 586-2113. In addition, there are several Federally-sponsored Hotlines with toll-free telephone numbers. As mentioned above, applicable Hotline numbers are listed in each chapter and are summarized in Appendix A.

**Sources:** This Handbook was prepared using the most recently available version of the Code of Federal Regulations (CFR) as available through LEGI-SLATE, an on-line database. The latest available hard copy of the CFR (July 1, 1990) was also used to cross-reference the information obtained from LEGI-SLATE. Other sources used include the following EPA guidance documents: Multi-Media Compliance Inspection Manual, The RCRA Inspection Manual, and The Land Disposal Restrictions Inspection Manual.[1]

[1] EH-231 Memorandum dated February 1, 1990, Subject: "Environmental Protection Agency (EPA) Land Disposal Restrictions Inspection Manual".

# PART II

# USER'S GUIDE TO THE HANDBOOK

## User's Guide to the Handbook

**Foreword:** As most users of the CFR are aware, the CFR does not present information in the same order from section to section. The "who, what, where, when, and why" of an inspection are not always presented consecutively from one part, or even from one section, to the next in the CFR. Because requirements in the CFR often are presented in this somewhat inconsistent fashion, important information is not always readily accessible. To make this Handbook as user-friendly as possible, the regulatory language as presented in the CFR has been arranged in a consecutive fashion as described below in "Tables of Regulations". Additionally, the CFR does not always provide all of the elements "who, what, where, when, and why" for each regulation. When possible, to complete these gaps, information was provided by the editors of this document. Where it was not possible to provide further information, the words "none specified" were inserted.

Users of this Handbook should note that to the extent practicable the regulatory language pertaining to each inspection requirement has been presented verbatim. For the sake of clarity, however, it was necessary in some cases to embellish or expand on the exact regulatory language. Quotation marks ("...") are used herein to distinguish verbatim regulatory language from such clarified, edited language.

**Summary Matrix:** A chart showing (inspection) elements common to all of the laws regarding inspections performed by regulatory authorities has been provided as Table I (see page 5). The table broadly summarizes major requirements for each statute, such as whether or not sampling of effluents by the regulatory authority is allowed as part of the inspection, or whether or not records can be inspected. If a statute lacked a provision for a listed activity (i.e., Presentation of credentials) that block in the table was shaded for easy identification.

**Tables of Regulations:** Each statute covered in this Handbook is addressed in a separate chapter that contains two parts: an introduction to the statute, and the summary tables.

**Introduction:** The introduction to each chapter provides the reader with the statutory authority for inspections, including any possible exemptions to that authority. It also identifies sources of assistance within DOE and the EPA,

**Summary Tables:** Column one, **General Information,** provides information such as the title of each section as presented in the CFR, the type of inspection (Self or Regulatory Authority), references from the CFR, and any

useful information which may be specific to that section (See Permit Status under RCRA on page 9 as an example).

The inspection information provided in the summary tables is divided into three categories under the **General Information** heading. The first category, ***Regulated Unit, is*** used for those regulations which are specific to one unit (such as Tank systems). The second category, ***Regulatory Activities,*** contains the regulations which allow for inspections of any facility regulated under an Act that are conducted by a regulatory agency. The last category, ***Inspection of Recordkeeping,*** identifies requirements for an owner or operator to maintain certain records at the facility for a specific period of time for inspection by regulatory authorities. Some tables only contain requirements from the first category, ***(Regulated Unit),*** such as the SDWA. Other summary tables, such as CAA contain requirements under all three categories. Since CERCLA is an "activity-specific" statute (i.e. not a "unit-specific" statute), the CERCLA chapter encompasses only ***Regulatory Activities.***

Column two, **Purpose,** is self explanatory.

Column three, **Scheduling Requirements,** alerts the reader to various scheduling elements related to inspection compliance. Discrete time elements (i.e., daily or weekly) have been underlined in column four.

Column four, **Required Procedures,** contains four sections. The first section, ***Elements of Inspection,*** identifies those actions which must be performed during an inspection. The second section, ***Solutions*** contains those actions which must be taken if an inspection reveals an episode of potential noncompliance (such as a leak from a valve). Solutions may include removal and/or repair work or other remedial activities. ***Inspection Report*** broadly identifies information which must be (1) reported soon after an inspection reveals an episode of noncompliance, and (2) included in a logbook or other type of permanent record. ***Personnel*** identifies those parties responsible for carrying out the inspection activities.

**Cross References:** Inspection requirements found in the CFR often contain many references to items found in other parts of the CFR. The first time that a citation is used within another section, the title of that citation is added to the text. For example, if 40 CFR 110.11 (Discharge at deep water ports) was referenced within the text of 40 CFR 112 (Oil pollution prevention), the title of 40 CFR 110.11 would be provided. Please note, however, that if the reference is to 40 CFR 110.ll(b), the referenced title would still be to 40 CFR 110.11 (Discharge at deep water ports) because titles often are not provided for subsections.

**Table I**

**SUMMARY OF FEDERAL ENVIRONMENTAL LAWS REGARDING INSPECTIONS BY REGULATORY AUTHORITIES**

| STATUTE | CFR Citation | Designated Representative | Presentation of Credentials | Notice of Inspection | Inspection of Records | Sampling Permitted | Sample Splits |
|---|---|---|---|---|---|---|---|
| **RCRA** § 3007(a) § 9005(a) | 40 CFR 264, 265 and 270 | Yes, designated by Administrator | | Not required | Yes | Yes | If requested, must also provide the owner with a receipt for the sample and promptly return the results of any analysis. |
| **CERCLA** § 104(e) | 40 CFR 300 | Yes, designated by President | | Upon reasonable notice for information | Yes | Yes | If requested, must also provide the owner with a receipt for the sample and promptly return the results of any analysis. |
| **AEA** § 161 (o) | 10 CFR 60 | Yes, designated by the Nuclear Regulatory Commission | | | Yes | | |
| **CAA** § 114 | 40 CFR 60 | Yes, designated by Administrator | Required | Not required, however, notice must be given to the stale prior to inspecting State Implementation Plans (SIP)s. | Yes | Yes | |
| **CWA** § 308 | 40 CFR 122 | Yes, designated by Administrator | Required | Not required | Yes | Yes (effluents which the owner is required to sample | |
| **SDWA** § 1445(b) | 40 CFR 144 | Yes, designated by Administrator | Required | Written notice required, must also notify State with reasons for entry if State has primary enforcement responsibility | Yes | Yes | |
| **TSCA** § 11 (a&b) | 40 CFR 717 | Yes, designated by Administrator | Required | Written notice required | Yes | (TSCA does not mention sampling in this section. It does state that an inspection shall extend to all things within the premises.) | |
| **FIFRA** § 8 | **40 CFR 165** | Yes, designated by Administrator | Required | Written notice required with reasons for inspection | Yes | Yes | If requested, must also provide the owner with a receipt for the sample and promptly return the results of any analysis. |

# PART III

# RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

**Resource Conservation and Recovery Act**
**(RCRA)**

**Purpose:** With the passage of the Resource Conservation and Recovery Act, and its subsequent amendments, Congress recognized and responded to the need for better management of solid and hazardous waste. To protect human health and the environment RCRA provides:

(1) Restrictions on the disposal of listed and characteristic hazardous wastes in land disposal facilities;

(2) Standards applicable to generators and transporters of hazardous wastes; and

(3) Standards for owners and operators of hazardous waste treatment, storage, and disposal facilities, including standards for the inspection of equipment and standards for facility inspections by regulatory authorities.

**Application to DOE:** Section 3007(c) of the Hazardous and Solid Waste Amendments of 1984 provides the authorization for compliance inspections at Federal facilities. Section 3007 states that "the administrator shall, or in the case of a State with an authorized hazardous waste program the State may, undertake on an annual basis a thorough inspection of each facility for the treatment, storage, and disposal of hazardous waste which is owned or operated by a Federal agency to enforce its compliance with this subtitle and the regulations promulgated thereunder." The records of such inspections shall be available to the public.

**Inspection Authorities:** **Inspection of manifests.**

Section 3002(a) requires "satisfactory reporting, monitoring, and inspection and compliance with the manifest system." The goal of manifest inspections is to assure that all of the contents of hazardous waste containers match those listed on a manifest or shipping paper.

**Access to facilities for inspections.**

Section 3007(a) authorizes representative of EPA or employees of States with authorized hazardous waste programs, to enter facilities to copy records and to "inspect and obtain samples from any person of any such wastes and samples of any containers or labeling of such wastes."

**Inspection of underground storage tanks.**

The inspection of underground storage tanks is authorized by Section 9005. In addition to authorizing access to underground storage tank facilities at "reasonable times", it also authorizes representatives of EPA or States to "inspect and obtain samples from any person of any regulated substances contained in such tank."

**EPA Inspections:** The Office of Waste Programs Enforcement (OWPE) has developed several different types of inspections which are performed under the RCRA program. These inspections are as follows:

**Compliance Evaluation Inspections** (CEIs) - Routine inspections of hazardous waste generators, transporters, and treatment, storage, and disposal facilities to evaluate facility compliance applicable RCRA standards.

**Case Development Inspections** (CDIs) - Inspections conducted for the specific purpose of gathering data in support of an enforcement action when RCRA violations are suspected or revealed during a CEI .

**Comprehensive Groundwater Monitoring Evaluations** (CMES) - Detailed evaluations of the adequacy of the design and operation of groundwater monitoring systems at RCRA facilities.

**Operation and Maintenance Inspection** (O&M) - Inspections of RCRA land disposal facilities to determine the adequacy of the operation and maintenance of groundwater monitoring systems.

**Lab Audits -** Inspections of laboratories performing groundwater monitoring analyses to determine if proper sample handling and analysis protocols are used.

**State Oversight Inspections -** Inspections conducted by U.S. EPA personnel to determine the effectiveness of a State hazardous waste management program and to determine facility compliance.

**Assistance:** DOE staff and contractors who have questions concerning RCRA may contact the Office of Environmental Policy and Assistance, RCRA/CERCLA Division (EH-413) at (202) 586-6374. In addition, EPA maintains a RCRA/CERCLA Hotline, which operates Monday-Friday, 9:00 a.m.- 6:00 p.m. (EST) at (800) 424-9346 or (703) 412-9810.

## Resource Conservation and Recovery Act (RCRA)

*RCRA provides some general inspection requirements (including inspections as part of RCRA permit requirements, and personnel training) for all hazardous waste facilities with interim or permitted status facilities. RCRA also provides for inspections by regulatory authorities. However, the majority of RCRA inspection requirements are facility specific.*

## Facilities with Inspection Requirements

- Containers
- New Tank Systems
- Surface Impoundments
- Waste Piles
- Land Treatment Units
- Landfills (Municipal Solid Waste and Hazardous Waste)
- Incinerators
- Miscellaneous Units
- Process Vents
- Pumps in Light Liquid Service
- Valves in Gas/Vapor Service or in Light Liquid Service
- Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors
- Thermal Treatment Units
- Boilers and Industrial Furnaces that bum Hazardous Waste
- New Hazardous Waste Landfills
- Underground Storage Tank Systems
- Waste in Tanks generated by small generators (between 100 and 1,000 Kg/Mo)

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Municipal solid waste landfills.<br><br>Type of Inspection:<br>Self inspection.<br><br>References:<br>40 CFR 258.20. | To provide for inspections at municipal solid waste landfills to ensure that certain materials are kept out of the landfill. | Inspections of incoming loads must be conducted on a random basis. | Elements of Inspection:<br>"Owners or operators of all municipal solid waste landfill units must implement a program at the facility for detecting and preventing the disposal of regulated hazardous wastes as defined in 40 CFR Part 261 (Identification and listing of hazardous waste) and polychlorinated biphenyls (PCB) wastes as defined in 40 CFR Part 761 (PCBs manufacturing, processing, distribution in commerce, and use prohibitions). This program must include, at a minimum:<br>(1) Random inspections of incoming loads unless the owner or operator takes other steps to ensure that incoming loads do not contain regulated hazardous wastes or PCB wastes, and<br>(2) Records of any inspections.<br>For purposes of this section, regulated hazardous waste means a solid waste that is a hazardous waste, as defined in 40 CFR 261.3 (Definition of hazardous waste), that is not excluded from regulation as a hazardous waste under 40 CFR 261.4( b) or was not generated by a conditionally exempt small quantity generator as defined in 40 CFR 261.5 (Special requirements for ... small quantity generators)."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Hazardous waste treatment, storage, and disposal facilities.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.13 (a)(3)(ii) and (a)(4) for permitted facilities and 265.13 (a)(3)(ii) and (a)(4) for interim status facilities. For additional information pertaining to manifest discrepancies (including reporting), see 40 CFR 264.72 and 265.72 and 40 CFR 264.76 and 265.76. | The regulations in this subpart provide for the analysis of hazardous waste to assure that wastes received at off-site facilities match those identified on the accompanying manifests or shipping paper. | None specified. | Elements of Inspection:<br>"The owner or operator of an off-site facility must inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Hazardous waste treatment, storage and disposal facilities.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.15(a) through (d) for permitted facilities and 265.15(a) through (d) for interim status facilities. | The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to a release of hazardous waste constituents to the environment or pose a threat to human health. | "The frequency of inspection may vary the items on the schedule. However, it should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject or interim status to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in 264/265.174 (Inspections), 264/265.193 (Containment and detection of releases), 264/265.195 (Inspections), 264/265.226 (Monitoring and inspection), 264.254 and 265.260 (Monitoring and Inspection), (Monitoring and Inspections), 265.377 | Elements of Inspection:<br>"The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards. He must keep this schedule at the facility. The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during theinspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.)."<br><br>"Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use."<br><br>Solutions:<br>"The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately."<br><br>Inspection Reports:<br>"The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and treatment, |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Hazardous waste treatment, storage and for disposal facilities. (Cont.) | | (Monitoring and Inspections), 265.403 (Inspections), 264.602 (Monitoring, analysis, inspection, response, reporting and corrective action), 264/265.1033 (Standards: Closed vent systems and control devices), 264/265.1052 (Standards: pumps in light liquid service), 264/265.1053 (Standards: compressors), 264/265.1058 (Standards: Valves in gas/vapor service or in light liquid service), and 264.1084 through 264.1088/265.1085 through 265.1090 (Standards: Tanks; Standards: Surface impoundments; Standards: Containers; Standards: Closed-vent systems and control devices; Inspection and monitoring requirements, where applicable." | storage and nature of any repairs or other remedial actions."<br><br><u>Personnel:</u><br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Hazardous waste treatment, storage, and disposal facilities.<br><br>Inspection Type<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.16(a)(l) and (3), (b), (c), (d)(3) and (4) for permitted facilities and 265.16 (a)(1) and (3), (b), (c), (d)(3) and (4) for interim status facilities. | "Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required" under Inspection Report. | "Facility personnel must successfully complete the program required in" Purpose "within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of "..." this section. Facility personnel must take part in an annual review of the initial training required in" Elements of Inspection. | Elements of Inspection:<br>"At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable, procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>"The owner or operator must maintain the following documents and records at the facility<br>(1) A written description of the type and amount of both introductory and continuing training that will be given to each person whose name and job title has been provided in the records.<br>(2) Records that document that the training or job experience required under this section has been given to, and completed by, facility personnel."<br><br>"Training records on current personnel must be kept until closure of the facility. Training records on former employee must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company." |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Hazardous waste treatment, storage, and disposal facilities. (Cont.) | | | Personnel:<br>Training must be conducted by a person trained in hazardous waste procedures. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Hazardous waste treatment, storage, and disposal facilities.<br><br>Type of Inspection:<br>Self inspection.<br><br>References:<br>40 CFR 270.14. | These regulations provide that, except as provided otherwise in §264.1, owners and operators of all HWM facilities must provide the information outlined in Elements of Inspection in Part B of the Permit application. | None specified | Elements of Inspection:<br>"A copy of the general inspection schedule required by §264.15(b) (General inspection requirements). Include, where applicable, as part of the inspection schedule, specific requirements in §§264.174 (Inspections), 264.193(i) (Containment and detection of releases), 264.195 (Inspections), 264.226 (Inspections), 264.254 (Monitoring and inspection), 264.273 (Design and operating requirements), 264.303 (Monitoring and inspection), 264.602 (Monitoring, analysis, inspection, response, reporting and corrective action) , 264.1033 (Monitoring and Inspection), 264.1052 (Standards: Pumps and valves in light liquid service), 264.1053 (Standards: Compressors), 264.1058 (Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors), 264.1084 (Standards: Tanks), 264.1085 (Standards: Surface impoundments), 264.1086 (Standards: Containers), and 264.1088 (Inspection and monitoring requirements) of this part [40 CFR Part 264]."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Surface impoundment, waste pile, or landfills.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.19. | To provide for a construction quality assurance program for certain hazardous waste disposal units. | None specified. | Elements of Inspection:<br>"A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with the design and operating requirements of 40 CFR 264.221( c) and (d), 264.251( c) and (d), and 264.301( c) and (d). The program must ensure that the constructed unit meets or exceeds all comply with the design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.<br><br>The CQA program must address the following physical components, where applicable: foundations; dikes; low-permeability soil liners; geomembranes (flexible membrane liners); leachate collection and removal systems and leak detection systems; and final cover systems.<br><br>The owner or operator of units subject to the CQA program must develop and implement a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include a description of inspection and sampling activities for all applicable unit components, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications.<br><br>The description must cover: sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Surface impoundment, waste pile, or landfills. (Cont.) | | | information to be recorded and retained in the operating record under 40 CFR 264.73 (Operating record)."<br><br>"The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:<br>(1) Structural stability and integrity of all components of the unit;<br>(2) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e. g., pipes) according to design specifications;<br>(3) Conformity of all materials used with design and other material specifications under the design and operating requirements of 40 CFR 264.221, 264.251, and 264.301."<br><br><u>Solutions:</u><br>None specified.<br><br><u>Inspection Reports:</u><br>None specified.<br><br><u>Personnel:</u><br>The owner or operator. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Containers that store hazardous waste.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.174 for permitted facilities and 265.174 for interim status facilities. Solutions were obtained from 40 CFR 264.171, and 40 CFR 264.15(c), as mandated by 264.174. 40 CFR 265.174 only mandates the use of 265.171, and not 40 CFR 265.15(c). | To provide for the inspection and remediation of containers. | At least weekly.<br><br>Immediately. | Elements of Inspection:<br>"At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors."<br><br>Solutions:<br>"If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part."<br><br>"The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately."<br><br>Inspection Reports:<br>No follow-up reporting or record keeping was specified in 40 CFR 264.174 or 265.174 however, 264.15(d) and 265.15(d) (See Inspection Report on page 10) specify record keeping requirements for inspections activities for hazardous waste treatment, storage and disposal facilities.<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Containers that store hazardous waste.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim status and permitted facilities, as well as large quantity (90-day) generators.<br><br>References:<br>40 CFR 264.179 for permitted facilities, and 265.178 for interim status facilities/generators, which triggers owners and operators to the applicable requirements of §§264.1086 and 265.1086 container standards. | To provide for inspection, detection, and repair of defective containers, covers, and devices used to control air pollutant emissions from containers at permitted/interim status facilities and 90-day generator accumulation areas used to manage containers holding hazardous waste possessing an average VO concentration equal to or greater than 500 parts per million by weight (ppmw) at the point of waste origination. | On or before the date that the container is accepted at the facility [unless the container is emptied in accordance with the conditions for an empty container as specified in 40 CFR 261.7(b) within | Elements of Inspection:<br>The owner or operator shall inspect and monitor air emission control equipment used to comply with 40 CFR Subpart CC in accordance with the applicable requirements specified in 40 CFR 264.1084/265.1085. The owner or operator shall develop and implement a written plan and schedule to perform the required inspections and monitoring. The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under 40 CFR 264/265.15.<br><br>The owner or operator of containers using Container Levels 1 and 2 controls shall inspect the containers and their covers and closure devices as follows:<br>(1) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., does not meet the conditions for an empty container as specified in 40 CFR 261.7(b)), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the subpart CC container standards). For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest in the appendix to 40 CFR part 262 (EPA Forms 8700-22 |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Containers that store hazardous waste (Cont.). | | 24 hours after the container is accepted].<br><br>At least once every 12 months.<br><br>NOTE: Visual inspections must be conducted on or before the time initial generators first manage a hazardous waste that is subject to Subpart CC container standards in their 90-day container accumulation areas (see 62 *FR* 64650; December 8, 1997).<br><br>No later than 24 hours after detection.<br>No later than 5 calendar days after detection. | and 8700-22A), as required under subpart E of this part, at 40 CFR 265.71."<br>(2) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 [one] year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.<br>(3) Owners and operators using Container Level 3 controls shall inspect and monitor the closed-vent systems and control devices as specified in §265.1088," which triggers the procedures specified in 40 CFR 264/265.1033 for process vents as described below.<br><br>Solutions:<br>When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Containers that store hazardous waste (Cont.). | | At least three years from the date of inspections. | Inspection Reports:<br>"Each owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspections. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions."<br><br>Personnel:<br>The owner or operator. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Tank systems.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or Final.<br><br>References:<br>40 CFR 264.191(a) through (d) for permitted facilities, and 40 CFR 265.191(a) through (d) for interim status facilities. | To ensure the integrity of tanks that do not have secondary containment. | | Elements of Inspection<br>"For each existing tank system that does not have secondary containment meeting the requirements of § 264.193, the owner or operator must determine that the tank system is not leaking or is unfit for use. Except as provided" in the last paragraph "of this section, the owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified registered professional engineer, in accordance with § 270.11(d) (Signatories to applications and reports) attesting to the system's integrity by January 12, 1988.<br><br>This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:<br>(1) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;<br>(2) Hazardous characteristics of the waste(s) that have been and will be handled;<br>(3) Existing corrosion protection measures;<br>(4) Documented age of the tank system, if available (otherwise, an estimate of the age); and<br>(5) Results of a leak test, internal inspection, such that<br>(i) For non-enterable underground tanks, the assessment must include a leak test that is capable to taking into account the effects of temperature variations, tank end deflection, vapor pockets, high water table effects, and<br>(ii) For other than non-enterable underground tanks and |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems. (Cont.) | | | for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination, that is certified by an independent, qualified, registered professional engineer in accordance with § 270.11(d) that addresses cracks, leaks, corrosion, and erosion."<br><br>"[NOTE: The American Petroleum Institute (API) Publication Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 1981, may be used, where applicable, in conducting other than a leak test.]" |
| | | Within 12 months after the date that the waste first becomes a hazardous waste. | "Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986, must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste."<br><br>Solutions:<br>"If, as a result of the assessment conducted in accordance with" the first paragraph of Elements of Inspection, "a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of §264.196 (see pg. 23)."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>This assessment must be conducted by an independent, qualified, registered, professional engineer. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Tank systems.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.192(b) and (g) for permitted facilities and 265.192(b) and (g) for interim status facilities. | "The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation." | "Prior to covering, enclosing, or placing a new tank system or component in use." | Elements of Inspection:<br>"Inspect the system or component for the presence of any of the following items:<br>(1) Weld breaks,<br>(2) Punctures,<br>(3) Scrapes of protective coatings,<br>(4) Cracks,<br>(5) Corrosion, or<br>(6) Other structural damage or inadequate construction/installation."<br><br>Solutions:<br>"All discrepancies must be remedied before the tank system is covered, enclosed, or placed into use."<br><br>Inspection Reports:<br>"The owner or operator must obtain and keep on tile at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of 40 CFR Part 264/265.192" (Design and installation of new tank systems or components) §§ (c) through (f) that attest that the tank system was properly designed and installed and that repairs, pursuant to 40 CFR Part 264/265.192 §§ (b) and (d), were performed. "These written statements must also include the certification statement as required in 40 CFR Part 270.1 l(d) (Certification)." |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Tank systems. (Cont.) | | | Personnel:<br>"An independent, qualified, installation inspector, or an independent, qualified, registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components." |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Tank systems.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.193(f) for permitted facilities and 265.193(f) for interim status facilities. | Ancillary equipment which is inspected on a daily basis is exempted from the requirements of 40 CFR 264.193(a) through (c) and 265.193(a) through (e) which mandates the use of secondary containment by tank systems. | Daily.<br><br>Daily.<br><br>Daily.<br><br>Daily. | Elements of Inspection:<br>"Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the" design requirements for secondary containment of 40 CFR 264.193(b) and (c) and 265.193(b) and(c) "except for:<br>(1) Aboveground piping (exclusive of flanges., joints, valves, and other connections) that are visually inspected for leaks on a daily basis;<br>(2) Welded flanges, welded joints, and welded connections, that are visually inspected for leaks on a daily basis;<br>(3) Sealless or magnetic coupling pumps and sealless valves, that are visually inspected for leaks on a daily basis; and<br>(4) Pressurized aboveground piping systems with automatic shut -off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Tank systems.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.195(a) through (c) for permitted facilities and 265.195(a) through (c) for interim status facilities. | "The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls." | Once each operating day.<br><br>Within 6 months after initial installation, and annually thereafter.<br>At least bimonthly. | Elements of Inspection:<br>"The owner or operator must inspect at least once each operating day:<br>(1) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;<br>(2) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design, and<br>(3) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation)."<br><br>"The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly<br>(1) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter, and<br>(2) All sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (i.e., every other month)."<br><br>Solutions:<br>*"[Note:* § 264.15(c) and 265.15(c) (General inspection requirements) require the owner or operator to remedy any deterioration or malfunction he finds. § 264.195 and |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems. (Cont.) | | | 265.195 require the owner or operator to notify the Regional Administrator within 24 hours of confirming a leak. Also, 40 CFR Part 302 (Designation, Reportable Quantities, and Notification) may require the owner or operator to notify the National Response Center of a release.]"<br><br>Inspection Reports:<br>"The owner or operator must document in the operating record of the facility an inspection of those items" identified in Elements of Inspection.<br><br>Personnel:<br>The owner or operator. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Tank systems.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.l96(a) through (f) for permitted facilities and 265.l96(a) through (f) for interim status facilities. | "A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the" requirements of 40 CFR 264.196, and 265.196. | | Elements of Inspection.<br>Visual inspection is required.<br><br>Solutions:<br>"Cessation of use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release." |
| | | Immediately. | |
| | | Within 24 hours. | "Removal of waste from tank system or secondary containment system. If the release was from the tank system, the owner/operator must, within 24 hours after detection of the leak, or if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed." |
| | | Within 24 hours. | "If the material released was to a secondary containment system, all released material must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment." |
| | | Immediately. | "Containment of visible releases to the environment. The owner/operator must immediately conduct a visual inspection of the release and, based upon that inspection: |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems. (Cont.) | | | (1) Prevent further migration of the leak or spill to soils or surface water and<br>(2) Remove, and properly dispose of, any visible contamination of the soil or surface water."<br><br>"Provision of secondary containment, repair, or closure.<br>(1) Unless the owner/operator satisfies the following requirements, the tank system must be closed in accordance with §264.197 (Closure and post-closure care).<br>(2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner/operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.<br>(3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.<br>(4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner/operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of § 264/265.193 (Containment and detection of releases), before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements" for the |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems. (Cont.) | | | certification of major repairs (the sixth paragraph of Solutions) "are satisfied. If a component is replaced to comply with the requirements of this subparagraph, that component must satisfy the requirements for new tank systems or components in §§ 264/265.192 (Design and installation of new tank systems or components) and 264/269.193. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with §264.193 prior to being returned to use."<br><br>'Certification of major repairs. If the owner/operator has repaired a tank system in accordance with the provisions for secondary containment, repair or closure, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner/operator has obtained a certification by an independent, qualified, registered, professional engineer in accordance with §270.ll(d) (Signatories to applications and reports) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Regional Administrator within seven days after returning the tank system to use.'<br><br>"[NOTE The Regional Administrator may, on the basis of any information received that there is or has been a release of |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems. (Cont.) | | | hazardous waste or hazardous constituents into the environment, issue an order under RCRA section 3004(v), 3008(h), or 7003(a) requiring corrective action or such other response as deemed necessary to protect human health or the environment.]"<br><br>"[NOTE See §264.15(c) (General Inspection Requirements) for the requirements necessary to remedy a failure. Also, 40 CFR Part 302 (Designation, Reportable Quantities, and Notification) may require the owner or operator to notify the National Response Center of certain releases.]"<br><br><u>Inspection Reports:</u><br>"(1) Anyrelease to the environment, except as provided below must be reported to the Regional Administrator <u>within 24 hours</u> of its detection. If the release has been reported pursuant to 40 CFR 302, that report will satisfy this requirement.<br>(2) A leak or spill of hazardous waste is exempted from the requirements of this paragraph if it is:<br>(i) less than or equal to a quantity of one (1) pound, and<br>(ii) Immediately contained and cleaned up. |
| | | Within 24 hours. | |
| | | Within 30 days. | (3) <u>Within 30 days</u> of detection of a release to the environment, a report containing the following information must be submitted to the Regional Administrator:<br>(i) Likely route of-migration of the release;<br>(ii) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);<br>(iii) Results of any monitoring or sampling in connection with the release (if available). If sampling or |

| Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems. (Cont.) | Within 30 days. As soon as data are available. | monitoring data related to the release are not available within 30 days, these data must be submitted to the Regional Administrator as soon as they become available.<br>(iv) Proximity to downgradient drinking water, surface water, and populated areas, and<br>(v) Description of response actions taken.<br><br>Personnel:<br>The owner or operator. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Tank systems.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim, final, and large quantity (90-day) generators.<br><br>References:<br>40 CFR 264.200 for permitted facilities and 265.202 for interim status facilities, which triggers owners and operators to the applicable requirements of §§264.1084 and 265.1084 for tank standards. | To provide for inspection, detection, and repair of defective covers and devices used to control air pollutant emissions from tank systems at permitted/interim status facilities and 90-day generator accumulation areas managing hazardous waste having an average VO concentration equal to or greater than 500 ppmw at the point of waste origination. | | Elements of Inspection:<br>The owner or operator shall inspect and monitor air emission control equipment used to comply with 40 CFR 264/265 Subpart CC in accordance with the applicable requirements specified in 40 CFR 264.1084/265.1085. The owner or operator shall develop and implement a written plan and schedule to perform the inspections and monitoring and shall incorporate this plan and schedule into the facility inspection plan required under 40 CFR 264.15.<br><br>"The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:<br>(1) "The **fixed roof and its closure devices)** shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices."<br>(2) Closed-vent systems and control devices shall be inspected and monitored by the owner or operator in accordance with the procedures specified in 40 CFR 264.1087/265.1088, which also triggers 40 CFR 264/265.1033(f)(2) and 40 CFR 264/265.1033(l) inspection requirements (see "**Closed-vent systems and control devices**" described below).<br><br>"The owner or operator shall inspect the **internal floating roof** in accordance with the procedures specified as follows: |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems (Cont.). | | | (1) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: The internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous waste surface from the atmosphere; or the slotted membrane has more than 10 percent open area.<br>(2) The owner or operator shall inspect the internal floating roof components as follows except as provided in paragraph (iii) below:<br>(i) Visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every 12 months after initial fill, and<br>(ii) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years.<br>(iii) As an alternative to performing the inspections specified in paragraph (2)(i) and (ii) above for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or |
| | | At least once every 12 months after initial fill. | |
| | | Each time the tank is emptied and degassed and at least every 10 years. | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems (Cont.). | | | operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 5 years." |
| | | Each time the tank is emptied and degassed and at least every 5 years. | (iv) Prior to each inspection required by (e)(3)(ii) or (e)(3)(iii) of this section [paragraphs (2)(ii) or (2)(iii) above], the owner or operator shall notify the Regional Adminstrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows: |
| | | At least 30 calendar days before refilling the tank. | (A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (iv)(B) below.<br>(B) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems (Cont.). | | | operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank. |
| | | No later than 7 calendar days before refilling of the tank. | |
| | | At least 7 calendar days before refilling the tank. | |
| | | | "The owner or operator shall inspect the **external floating roof** in accordance with the procedures specified as follows:<br>(1) The owner or operator shall measure the **external floating roof seal gaps** in accordance with the following requirements:<br>(i) The owner or operator shall perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.<br>(ii) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the |
| | | Within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years. | |
| | | Within 60 calendar days after initial operation of the tank | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems (Cont.). | | following installation of the floating roof and, thereafter, at least once every year. | tank following installation of the floating roof and, thereafter, at least once every year.<br>(iii) If a tank ceases to hold hazardous waste for a period of 1 year or more, subsequent introduction of hazardous waste into the tank shall be considered an "initial operation" for the purposes of paragraphs (1)(i) and (1)(ii) above.<br>(iv) The owner or operator shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure:<br>(A) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.<br>(B) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter (cm) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.<br>(C) For a seal gap measured under this section or paragraph (2) (below), the gap surface area shall be determined by using probes of |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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Tank systems (Cont.).

various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(D) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type [primary or secondary seal] as specified in 40 CFR 264.1084(f)(1)(ii).

(2) The **floating roof and its closure devices** shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: Holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems (Cont.). | | | other closure devices.<br>(3) The owner or operator shall perform an initial inspection of the air emission control equipment (i.e., fixed roof and its closure devices; external floating roof and its closure devices) on or before the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspection at least once every year except under the special conditions provided for in paragraph (l) of this section [i.e., the last two paragraphs of Elements of Inspection]."<br>(4) Prior to each inspection required by paragraph (f)(3)(i) or (f)(3)(ii) of this section [paragraphs (1) and (2) above], the owner or operator shall notify the Regional Administrator in advance of each inspection to provide the Regional Administrator with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Regional Administrator of the date and location of the inspection as follows:<br>(i) Prior to each inspection to measure external floating roof seal gaps as required under paragraph (f)(3)(i) of this section [paragraph (1) above], written notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before the date the measurements are scheduled to be performed. |
| | | On or before the tank becomes subject to Subpart CC.<br>At least once every year. | |
| | | At least 30 calendar days before the date the measurements are scheduled to be performed. | |
| | | | (ii) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
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| Tank systems (Cont.). | | | notification shall be prepared and sent by the owner or operator so that it is received by the Regional Administrator at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in paragraph (f)(3)(iii)(C) of this section [paragraph (5) below]. |
| | | At least 30 calendar days before refilling the tank. | (5) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Regional Administrator as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least 7 calendar days before refilling the tank. |
| | | No later than 7 calendar days before refilling of the tank. | |
| | | At least 7 calendar days before refilling the tank. | |
| | | Longer than 1 year. | Following the initial inspection and monitoring of the cover as required by the applicable provisions of [40 CFR 264/265, Subpart CC], subsequent inspections and monitoring may be performed at intervals longer than 1 year under the following conditions:<br>(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with the following requirements: |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Tank systems (Cont.). | | | (i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor;<br>(ii) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of Subpart CC, as frequently as practicable during those times when a worker can safely access the cover.<br><br>(2) In the case when a tank is buried partially or entirely underground, an owner operator is required to inspect and monitor, as required by the applicable provisions of Subpart CC, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.<br><br>Solutions:<br>In the event that the seal gap measurements do not conform to the specifications or a defect is detected during an inspection, the owner or operator shall repair the defect as follows:<br>(3) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (k)(2) of this section.<br>(4) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or |
| | | No later than 5 calendar days after detection.<br>No later than 45 calendar days after detection.<br><br>Beyond 45 calendar days. | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Tank systems (Cont.). | | | temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.<br><br>Inspection Reports:<br>"The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §265.1090(b) of this subpart [40 CFR 264/265, subpart CC]. The owner or operator of a tank using air emission controls in accordance with the requirements of 40 CFR 264.1084 shall prepare and maintain in the operating record for a minimum of 3 years the following information:<br>(1) A record for each inspection required by 40 CFR 264.1084 that includes the following information:<br>(i) Date inspection was conducted.<br>(ii) For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.<br>(2) Owners or operators using external floating roof to comply with the Tank Level 2 control requirements |
| | | Minimum of 3 years. | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Tank systems (Cont.). | | | specified in 40 CFR 264.1084(f) shall prepare and maintain the following records:<br>(i) Records for each seal gap inspection required by 40 CFR 264.1084(f)(3) describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in 264.1084(f)(1), the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.<br>(3) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in §264.1084(i) of this subpart shall prepare and maintain the following records:<br>(i) Records required for the closed-vent system and control device in accordance with the requirements of paragraph (e) of this section [as described for "**Process Vents**" under the heading "Inspection Reports later in this RCRA section]."<br>(4) An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to 40 CFR 264.1084(l) or 264.1085(g) shall record in a log that is kept in the facility operating record the following information: The identification numbers for waste management units with covers that are designated as |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Tank systems (Cont.). | | | "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.<br><br>Personnel:<br>The owner or operator. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Tank systems.<br><br>Inspection Type<br>Self inspection.<br><br>Permit Status:<br>Interim.<br><br>Reference,<br>40 CFR 265.201(a) and (c) for interim status facilities. There are no corresponding requirements for permitted facilities. | The requirements of this section provide inspection requirements for small quantity generators of more than 100 kg, but less than 1,000 kg of hazardous waste in a calendar month, that accumulate hazardous waste in tanks for less than 180 days (or 270 days if the generator must ship the waste greater than 200 miles), and that do not accumulate over 6,000 kg on-site at any time. | At least once each operating day. | Elements of Inspection:<br>"Generators of between 100 and 1,000 kg/month accumulating hazardous waste in tanks must inspect, where present:<br>(1) Discharge control equipment_ (e.g., waste-cutoff systems, bypass systems and drainage systems) at least once each operating day to ensure that it is in good working order,<br>(2) Data gathered from monitoring equipment (e.g., pressure and temperature) at least once each operating day to ensure that the tank is being operated according to its design,<br>(3) The level of waste in the tank at least once each operating day to ensure compliance with § 265.201(b)(3) [uncovered tanks mast be operated to ensure at least 60 centimeters (2 feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.],<br>(4) The construction of materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams, and<br>(5) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation)."<br><br>Solutions:<br>None were specified, however, as required by § 265.15(c) (General inspection requirements), the owner or operator must remedy any deterioration or malfunction he finds." |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Tank Systems. (Cont.) | | | Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Surface impoundments.<br><br>Inspection Type:<br>Self Inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.226(a) through (c) for permitted facilities and 265.226(a) through (c) for interim status facilities.<br>(40 CFR 265.226 contains inspection requirements, but as they are slightly different from 264.226, they have been included separately at the end of Elements of Inspection.) | To provide for monitoring and inspection during construction, installation, and operation of surface impoundments. | During construction and installation. | Elements of Inspection:<br>"During construction and installation, liners (except in the case of existing portions of surface impoundments exempt from §264.221(a) (Design and operating requirements)) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g. holes, cracks, thin spots, or foreign materials)." |
| | | Immediately after construction or installation. | "Immediately after construction or installation:<br>(1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and<br>(2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that my cause an increase in the permeability of the liner or cover." |
| | | Weekly and after storms. | "While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following<br>(1) Deterioration, malfunctions, or improper operation of overtopping control systems;<br>(2) Sudden drops in the level of the impoundment's content; and<br>(3) Severe erosion or other signs of deterioration in dikes or other containment devices." |
| | | Prior to issuance of a permit; and following an | "Prior to the issuance of a Permit, and after any extended period of time (at least six months) during which the impoundment was |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Surface impoundments. (Cont.) | | extended period out of service. | not in service, the owner or operator must obtain a certification from a qualified engineer that the impoundment's dike, including that portion of any dike which provides freeboard, has structural integrity. The mortification must establish, in particular, that the dike<br>(1) Will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and<br>(2) Will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction."<br><br>40 CFR 265.226 requires the owner or operator to inspect<br>"(1) The freeboard level at least once each operating day to ensure compliance. with §265.222 (General operating requirements), and<br>(2) The surface impoundment including dikes and vegetation surrounding the dike at least once a week to detect any leaks, deterioration or failures in the impoundment. As required by § 265.15(c), (General inspection requirements) the owner or operator must remedy any deterioration or malfunction he finds."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified. |
| | | At least once each operating day. | |
| | | At least once a week. | |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Surface impoundments. (Cont.) | | | Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Surface impoundments.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 270.17(c). | These regulations provide that, except as otherwise provided in §264.190 (Applicability), owners and operators of facilities that use tanks to store or treat hazardous waste must provide the information outlined in Elements of Inspection in Part B of the Permit application. | None specified. | Elements of Inspection:<br>"A description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of § 264.226(a) and (b) (Monitoring and inspection). This information should be included in the inspection plan submitted under § 270.14(b)(5) (Contents of Part B: General requirements."<br><br>Solutions:<br>None specified.<br><br>Inspections Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Surface impoundments.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Final or Interim.<br><br>References:<br>40 CFR 264.232 for permitted facilities and 265.231 for interim status facilities, which triggers owners and operators to the applicable requirements of §§264.1085 and 265.1085 for surface impoundment standards. | These regulations provide for the inspection, detection, and repair of defective air emission control equipment used to control air pollutant emissions from surface impoundments at permitted/interim status facilities managing hazardous waste having an average VO concentration equal to or greater than 500 ppmw at the point of waste origination. | | Elements of Inspection:<br>The owner or operator shall inspect and monitor air emission control equipment used to comply with 40 CFR 264/265 Subpart CC in accordance with the applicable requirements specified in 40 CFR 264.1084/265.1085. The owner or operator shall develop and implement a written plan and schedule to perform the inspections and monitoring and shall incorporate this plan and schedule into the facility inspection plan required under 40 CFR 264.15.<br><br>"The owner or operator who controls air pollutant emissions from surface impoundment using a floating membrane cover shall meet the requirements specified in paragraphs (c)(1) through (c)(3) of this section.<br>(1) The owner or operator shall inspect the **floating membrane cover** in accordance with the following procedures:<br>(i) The floating membrane cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.<br>(ii) The owner or operator shall perform an initial inspection of the floating membrane |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Surface impoundments (Cont.). | | On or before the date that the surface impoundment becomes subject to this section.<br>Thereafter, at least once every year. | cover and its closure devices on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (g) of this section.<br>"The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in paragraphs (d)(1) through (d)(3) of this section.<br>(1) The owner or operator shall inspect and monitor the ***air emission control equipment*** in accordance with the following procedures:<br>(i) The surface impoundment cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or other-wise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.<br>(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in 40 CFR 264/265.1033 for process vents as |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Surface impoundments (Cont.). | | On or before the date that the surface impoundment becomes subject to this section.<br>Thereafter, at least once every year. | described below.<br>(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in paragraph (g) of this section.<br><br>" Following the initial inspection and monitoring of the cover as required by the applicable provisions of this subpart, subsequent inspection and monitoring may be performed at intervals longer than 1 year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:<br>(1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.<br>(2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable section of this subpart as frequently as practicable during those times when a worker can safely access the cover.<br><br>Solutions:<br>"In the event that a defect is detected during an inspection, the owner or operator shall repair the defect as follows:<br>(1) The owner or operator shall make first efforts at |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Surface impoundments (Cont.). | | No later than 5 calendar days after detection.<br>No later than 45 calendar days after detection. | repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (k)(2) of this sec tion.<br>(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.<br><br>Inspection Reports:<br>"The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of §264.1085/§265.1086 of this subpart shall prepare and maintain records for the surface impoundment that include the following information:<br>(1) A record for each inspection required by §264.1085/§265.1086 of this subpart that includes the following information:<br>(i) Date inspection was conducted.<br>(ii) For each defect detected during the inspection the following information: The location of the defect, a description of the defect, the date of detection, and corrective |
| | | The next time the process or unit that is generating the hazardous waste managed in the tank stops operation. | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Surface impoundments (Cont.). | | | action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §264.1085(f)//§265.1086(f) of this subpart, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.<br>(2) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator shall prepare and maintain the records specified in paragraph (e) of this section [as described for Process Vents under the heading "Inspection Reports later in this RCRA section]."<br><br>"An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to §264.1084(l)/§265.1085(l) [tanks] or §264.1085(g)/§265.1086(g) [surface impoundments] shall record in a log that is kept in the facility operating record the following information: The identification numbers for waste management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover."<br><br>Personnel:<br>Owner or operator. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Waste piles.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Final.<br><br>References:<br>40 CFR 264.254(a) for permitted facilities.<br>There are no inspection requirements in 40 CFR 265.254 for interim status facilities. | To provide inspection requirements during construction, installation, and operation. | During construction or installation. | Elements of Inspection:<br>"During construction or installation, liners (except in the case of existing portions of piles exempt from §264.251(a)) (Design and operating requirements) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials)." |
| | | Immediately. | "Immediately after construction or installation:<br>(1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and<br>(2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover." |
| | | Weekly and after storms. | 'While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of any of the following<br>(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;<br>(2) Proper functioning of wind dispersal control systems, where present; and<br>(3) The presence of leachate in and proper functioning of leachate collection and removal systems, where appropriate."<br><br>Solutions:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Waste piles. (Cont.) | | | Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Waste piles.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 270.18(d). | These regulations provide that, except as otherwise provided in 5264.1 (Purpose, scope and applicability), owners and operators of facilities that store or treat hazardous waste in waste piles must provide the information outlined in Elements of Inspection in Part B of the Permit application. | None specified. | Elements of Inspection:<br>"A description of how each waste pile, including the liner and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of § 264.254(a) and (b). This information should be included in the inspection plan submitted under § 270.14(b)(5)."<br><br>Solutions:<br>None specified.<br><br>Inspections Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Land treatment units.<br><br>Inspection Type:<br>self inspection.<br><br>Permit Status:<br>Final.<br><br>References:<br>40 CFR 264.273(g) for permitted facilities.<br>Purpose was obtained from 40 CFR 264.271 (Treatment program). There are no inspection requirements in 40 CFR 265.273 for interim status facilities. | To provide for the design, construction, operation, and maintenance of the land treatment unit to maximize the success of degradation, transformation, and immobilization of hazardous constituents in the treatment zone. | Weekly and after storms. | Elements of Inspection:<br>"The owner or operator must inspect the unit weekly and after storms to detect evidence of:<br>(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems; and<br>(2) Improper functioning of wind dispersal control measures."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Land treatment units.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 270.20. | These regulations provide that, except as otherwise provided in § 264.1 (Purpose, scope, and applicability), owners and operators of facilities that use land treatment to dispose of hazardous waste must provide the information outlined in Elements of Inspection in Part B of the Permit application. | None specified. | Elements of Inspection:<br>"Periodic inspection of the unit. This information should be included in the inspection plan submitted under § 270.14(b)(5) (Contents of Part B: General requirements)."<br><br>Solutions:<br>None specified.<br><br>Inspections Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Landfills.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Final.<br><br>References:<br>40 CFR 264.303(a) and (b) for permitted facilities. There are no inspection requirements in 40 CFR 265.303 for interim status facilities. | To provide for the monitoring and inspection of landfills and landfill liners. | During construction or installation. | Elements of Inspection:<br>"During construction or installation, liners (except in the case of existing portions of landfills exempt from §264.301(a) (Design and operating requirements)) and cover systems (e.g., membranes sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials)." |
| | | Immediately after construction or installation. | "Immediately after construction or installation:<br>(1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and<br>(2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover." |
| | | Weekly and after storms. | 'While a landfill is in operation, it must be inspected weekly and after storms to detect evidence of any of the following<br>(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;<br>(2) Proper functioning of wind dispersal control systems, where present; and<br>(3) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.'<br><br>Solutions:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Landfills. (Cont.) | | | Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Landfills.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 270.21. | These regulations provide that, except as otherwise provided in 5264.1, (Purpose, scope and applicability), owners and operators of facilities that dispose of hazardous waste in landfills must provide the information outlined in Elements of Inspection in Part B of the Permit application. | None specified. | Elements of Inspection:<br>"A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of § 264.303(a) and (b) (Monitoring and Inspection). This information should be included in the inspection plan submitted under § 270.14(b)(5) (Contents of Part B: General requirements)."<br><br>Solutions:<br>None specified.<br><br>Inspections Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| **General Information** | Purpose | **Scheduling** Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Incinerators.<br><br>Inspection Type:<br>Self inspection.<br><br>" Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.347(b) and (d) for permitted facilities. 40 CFR 265.347(b) contains inspection requirements for interim status facilities, but as they are slightly different from 264.347, they have been listed separately at the end of Elements of Inspection. 40 CFR 265.347 does not require the Inspection Report found in 40 CFR 264.347. | To provide for inspections while incinerating hazardous waste. | Daily.<br><br>weekly.<br><br>Monthly. | Elements of Inspection:<br>"The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering."<br><br>"The emergency waste feed cutoff system and associated alarms must be tested at least weekly to verify operability, unless the applicant demonstrates to the Regional Administrator that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted at least monthly."<br><br>40 CFR 265.347 requires the same inspection elements as described in the first paragraph of Elements of Inspection and also requires that" all emergency shutdown controls and system alarms must be checked to assure proper operation."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>Monitoring and inspection data must be recorded and the records must be placed in the operating log required by §264.73 (Operating Record).<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Miscellaneous units.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Final.<br><br>References:<br>40 CFR 264.602 for permitted facilities. There are no inspection requirements under 40 CFR 265.602 for interim status facilities. | To ensure compliance with a broad variety of environmental regulations. | "Monitoring, testing, analytical data, inspection, response, and reporting procedures and frequencies must ensure compliance with 55264.601 (Environmental Performance Standards), 264.15 (General Inspection Requirements), 264.33 (Testing and Maintenance of Equipment), 264.75 (Biennial Report), 264.76 (Unmanifested Waste Report), 264.77 (Additional Reports), and 264.101 (Corrective Action for Solid Waste Management Units), as well as meet any additional requirements needed to protect human health and the environment as specified in the permit." | Elements of Inspection.<br>See 40 CFR 264.15 (General inspection requirements) on page 14.<br><br>Solutions:<br>See 40 CFR 264.101 (Corrective action for solid waste management units)<br><br>Inspection Reports:<br>See 40 CFR 264.76 (Unmanifested waste report) and 264.77 (Additional reports).<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| **General Information** | Purpose | **Scheduling** Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Miscellaneous units.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 270.23. | These regulations provide that, except as otherwise provided in §264.600 (Applicability), owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units must provide the information outlined in Elements of Inspection in Part B of the Permit application. | None specified. | Elements of Inspection:<br>"Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements of § 264.601 (Environmental performance standards) and 264.602 (Monitoring, analysis, inspection, response, reporting, and corrective action)" must be included in Part B of the permit application.<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER THE CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Process vents.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim or Final<br><br>References:<br>40 CFR 264.1033(f) and (l) for permitted facilities, and 265.1033(f) and (k) for interim status facilities. | "The owner or operator shall monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device."<br><br>"The owner or operator shall monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed- vent system." | At least once each operating day.<br><br>At least once every hour. | Elements of Inspection:<br>"Inspect the readings from each monitoring device required by 40 CFR 264/265.1033 at least once each operating day to cheek **control device** operation."<br><br>"The owner or operator shall monitor and inspect each control device required to comply with 40 CFR 264.1033(f) to ensure proper operation and maintenance of the control device by implementing the following requirements:<br>(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour.<br>(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:<br>(i) A temperature monitoring device equipped with a continuous recorder for thermal vapor incinerators, catalytic vapor incinerators, or boilers or process heaters having a design heat input capacity less than 44 MW;<br>(ii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.<br>(iii) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Process vents (Cont.). | | | (iv) For a condenser, either:<br>(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser, or<br>(B) A temperature monitoring device equipped with a continuous recorder.<br>(v) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:<br>(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or<br>(B) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular. pre-determined time cycle. |
| | | At least once each operating day. | (3) Inspect the readings from each monitoring device listed above at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this section.<br><br>NOTE: An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Process vents (Cont.). | | | with these standards and the control device's design specifications. Also, an owner or operator of an affected facility seeking to comply with Subpart AA provisions by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.<br><br>Each **closed-vent system** that is used to comply with 40 CFR 264.1033(k)(1) and 265.1033(j)(1) (no detectable emissions) shall be inspected and monitored in accordance with the following requirements:<br>(1) An initial leak detection monitoring of the closed-vent system shall be conducted by the owner or operator on or before the date that the system becomes subject to this section. The owner or operator shall monitor the closed-vent system components and connections using the procedures specified in §264.1034(b) of this subpart to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmw above background.<br>(2) After initial leak detection monitoring required in paragraph (l)(1)(i) of this section, the owner or operator shall inspect and monitor the closed-vent system as follows:<br>(i) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and |
| | | On or before the date that the system becomes subject to §264/265.1033 (Subpart AA standards for closed-vent systems and control devices). | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Process vents (Cont.). | | Once per year. | gasketed ducting flange) shall be visually inspected at least <u>once per year</u> to check for defects that could result in air pollutant emissions. The owner or operator shall monitor a component or connection using the procedures specified in §264.1034(b) of this subpart to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).<br>(ii) Closed-vent system components or connections other than those specified in paragraph (l)(1)(ii)(A) of this section shall be monitored <u>annually</u> and <u>at other times as requested by the Regional Administrator</u>, except as provided for in paragraph (o) of this section, using the procedures specified in §264.1034(b) of this subpart to demonstrate that the components or connections operate with no detectable emissions. |
| | | Annually.<br>At other times as requested by the Regional Administrator. | |
| | | | <u>Solutions:</u><br>"If necessary, immediately implement the corrective measures necessary to ensure the **control device** operates in compliance with the requirements of this section."<br><br>"In the event that a [**closed-vent system**] defect or leak is detected, the owner or operator shall repair . . . . all detected defects as follows: |

**INSPECTION REQUIREMENTS UNDER THE CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Process vents (Cont.). | | Not later than 15 calendar days. | (1) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmw above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in paragraph (3) below. |
| | | No later than 5 calendar days. | (2) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected. |
| | | End of the next process unit shutdown. | (3) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown." |
| | | | Inspection Reports:<br>"Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part shall be recorded and kept up-to-date in the facility operating record." The information included shall comply with the requirements of 40 CFR 264/265.1035. |
| | | Three years. | "Records of the monitoring, operating, and inspection information required by 40 CFR 264/265.1035 need be kept only 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record." |
| | | | Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Pumps in light liquid service.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.1052(a)(2) and (a)(6)(ii) for permitted facilities, and 265.1052(a)(2) and (a)(6)(ii) for interim status facilities | To provide for the inspection of each pump in light liquid service to detect leaks by the methods specified in 264.1063(b) and 265.1063(b), (Test methods and procedures), unless exempted from these regulations. | Each calendar week. | Elements of Inspection:<br>'Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If there are indications of liquids dripping from the pump seal, a leak is detected."<br><br>Solutions:<br>"When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §264.1059 (Standards, delay of repair)."<br><br>"A 'first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Compressors.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.1053(d) through (h) for permitted facilities and 40 CFR 265.1053(d) through (h) for interim status facilities. | To provide for the inspection of barrier fluid system sensors. | | Elements of Inspection:<br>"Each barrier fluid system as described in 40 CFR 264/265.1053 shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both." |
| | | Daily.<br>Monthly. | "Each sensor "..." shall be checked daily or shall be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily." |
| | | Daily. | The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system or both."<br><br>"If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under the above paragraph, a leak is detected." |
| | | 15 calendar days.<br><br>5 calendar days. | Solutions:<br>"When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 265.1059. **A first** attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected."<br><br>"A compressor is exempt from the requirements of paragraphs (a) and (b) 40 CFR 264/265.1053 if it is equipped with a closed-vent system capable of capturing and transporting any leakage from |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Compressors. (Cont.) | | | the seal to a control device that complies with the requirements of §265.1060, except as provided in paragraph (i) of 40 CFR 264/265.1053."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator, |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Valves in gas/vapor service or in light liquid service.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 264.1057(a) through (h) for permitted facilities, and 265.1057(a) through (h) for interim status facilities. | To provide for the inspection of valves in gas/vapor service., or in light liquid service, to detect for leaks. | Monthly. | Elements of Inspection:<br>"Each valve in gas/vapor or light liquid service shall be monitored (inspected) monthly to detect leaks by the methods specified in § 264.1063(b) (Test methods and procedures) and shall comply with paragraphs (2), (3), and (4) of this section, and paragraphs (1) and (2) of Solutions except as provided in paragraphs (3), (4) and (5) of Solutions, and §§ 264/265.1061 (Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak) and 264/265.1062 (Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair)."<br><br>"If an instrument reading of 10,000 ppm or greater is measured, a leak is detected."<br><br>"Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected." |
| | | Monthly. | "If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months." |
| | | No later than 15 calendar days after the leak is detected. | Solutions:<br>"When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §264.1059 (Standards: Delay of repair)."<br><br>"A first attempt at repair shall be made no later than 5 calendar |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Valves in gas/vapor service or in light liquid service. (Cont.) | | | days after days after each leak is detected.<br><br>"First attempts at repair include, but are not limited to, the following best practices where practicable:<br>(1) Tightening of bonnet bolts.<br>(2) Replacement of bonnet bolts.<br>(3) Tightening of packing gland nuts.<br>(4) Injection of lubricant into lubricated packing."<br><br>"Any valve that is designated, as described in § 264.1064(g)(2) (Recordkeeping requirements), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of" the first and second paragraphs of Elements of Inspection" if the valve:<br>(1) Has no external actuating mechanism in contact with the hazardous waste stream.<br>(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 264.1063(c) (Test methods and procedures).<br>(3) Is tested for compliance with (2) of this section initially upon designation, annually, and at other times as requested by the Regional Administrator."<br><br>"Any valve that is designated, as described in § 264.1064(h)(l), as an unsafe-to-monitor valve is exempt from the requirements of" the first paragraph of Elements of Inspection" if: The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with the" first |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Valves in gas/vapor service or in light liquid service. (Cont.) | | | paragraph of Elements of Inspection", or the owner or operator adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times."<br><br>"Any valve that is designated, as described in § 264.1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of" the first and second paragraphs of Elements of Instruction" if:<br>"(l) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.<br>(2) The hazardous waste management unit within which the valve is located was in operation before June 21, 1990," and<br>(3) "The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year."<br><br>At least once per calendar year<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

| General Information | **Purpose** | Scheduling **Requirements** | **Required Procedures** |
|---|---|---|---|
| Regulated Unit:<br>Pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and other " connectors.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim and final.<br><br>References:<br>40 CFR 264.1058(a) through (c) for permit facilities and 265.1058(a) through (c) for interim status facilities. Inspection Reports was obtained from 264.1064. | To provide for the inspection of pumps and valves in heavy liquid service, as well as the other devices described in this section. | Within 5 days<br><br>Not later than 15 days after a leak is detected.<br><br>Not later than 5 days after each leak is detected. | Elements of Inspection:<br>"Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in § 264.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method."<br><br>"If an instrument reading of 10,000 ppm or greater is measured, a leak is detected."<br><br>Solutions:<br>"(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected 'except as provided in §264.1059 (Standards: Delay of repair).<br>(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.<br>(3) First attempts at repair include, but are not limited to, the best practices described under § 264.1057(e) (Standards: Valves in gas/vapor service or in light liquid service)."<br><br>Inspection Reports:<br>"When each leak is detected as specified in § 264.1052 (Standards: Pumps in light liquid service), 264.1053 (Standards: Compressors), 264.1057 (Standards: Valves in gas/vapor service or in light liquid service), and 264.1058 (Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors). The following information shall be recorded in an inspection log |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and other connectors. (Cont.) | | | and shall be kept in the facility operating record:<br>(1) The instrument and operator identification numbers and the equipment identification number,<br>(2) The date evidence of a potential leak was found in accordance with § 264.1058(a),<br>(3) The date the leak was detected and the dates of each attempt to repair the leak,<br>(4) Repair methods applied in each attempt to repair the leak,<br>(5) "Above 10,000" if the maximum instrument reading measured by the methods specified in § 264.1063(b) after each repair attempt is equal to or greater than 10,000 ppm,<br>(6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak,<br>Within 15 days.<br>(7) Documentation supporting the delay of repair of a valve in compliance with § 264/265.1059(c) (Standards: delay of repair) ,<br>(8) The signature of the owner or operator (or designate) whose decision it was that repair could not be affected without a hazardous waste management unit shutdown,<br>(9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days,[m] and<br>Within 15 calendar days.<br>'(10) The date of successful repair of the leak."<br><br>"Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of § 264/265.1060 (Standards: Closed-vent systems and control devices) shall be recorded and kept up-to-date in the facility operating record as specified in § 264/265.1035(C) (Recordkeeping requirements). |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and other connectors. (Cont.) | | | Design documentation is specified in § 264.1035(c)(1) and (c)(2) and monitoring, operating, and inspection information in § 264/265.1035(c)(3)-(c)(8).”<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER THE CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Closed-vent systems and control devices<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim or Final<br><br>References:<br>40 CFR 264.1087((c)(7) & 40 CFR 265.1088(c)(7). | These regulations provide Subpart CC-specified inspection requirements, as well as trigger owners or operators to applicable process vent (Subpart AA) inspection requirements set forth in 40 CFR 264.1033(f)(2) and (l) for permitted facilities, and 265.1033(f)(2) and (k) for interim status facilities. | At least once every month.<br><br>At least once each operating day<br><br>Immediately. | Elements of Inspection:<br>"The closed-vent system shall meet the following requirements:<br>(1) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow indicator as specified in 264.1087(b)(3)(i) or a seal or locking device as specified in 264.1087(b)(3)(ii).<br>(i) If a seal or locking device is used to comply, the device shall be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.<br>(2) The closed-vent system and control device shall be inspected by the owner or operator in accordance with the procedures specified for Process Vents in 40 CFR 264.1033(f)(2) and 40 CFR 264.1033(l). The readings from each monitoring device required by 40 CFR 264.1033(f)(2) shall be inspected at least once each operating day to check control device operation.<br><br>Solutions:<br>Any necessary corrective measures shall be immediately |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Closed-vent systems and control devices (Cont.) | | | implemented to ensure the control device is operated in compliance with the requirements of Subpart CC. this section<br><br>Inspection Reports:<br>***For permitted facilities only***, "Each owner or operator using a control device in accordance with the requirements of 40 CFR 264.1087 [Standards: Closed-vent systems and control devices] shall submit a semiannual written report to the Regional Administrator unless, during the previous 6-month period:<br><br>(1) No affected control device was operated in noncompliance with the applicable operating values [defined in 264.1035(c)(4)] continuously for a period of 24 hours or longer; and<br>(2) No flare was operated with visible emissions for 5 minutes or longer in a two-hour period, as defined in 264.1033(d).<br><br>The report, if required, shall describe each occurrence during the previous 6-month period when either: (1) A control device is operated continuously for 24 hours or longer in noncompliance with the applicable operating values defined in 264.1035(c)(4); or (2) A flare is operated with visible emissions for 5 minutes or longer in a two-hour period, as defined in 264.1033(d). The written report shall include the EPA identification number, facility name and address, and an explanation why the control device could not be returned to compliance within 24 hours, and actions taken to correct the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator. |
| | | Semiannual. | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Closed-vent systems and control devices (Cont.) | | Minimum of 3 years. | "Each owner or operator of a facility subject to requirements in Subpart CC shall record and maintain the information specified in 40 CFR 264.1089(b) through (i), as applicable to the facility. Except for air emission control equipment design documentation and information required by paragraph (i) for organic peroxide manufacturers, records required by this section shall be maintained in the operating record for a minimum of 3 years.<br><br>An owner or operator shall record the information required under (1) through (3) below for those unexpected control device system malfunctions that would require the control device not to meet the requirements of 40 CFR 264.1087(c)(1)(i), (c)(1)(ii), or (c)(1)(iii), as applicable.<br><br>(1) The occurrence and duration of each malfunction of the control device system.<br>(2) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.<br>(3) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.<br><br><u>Personnel:</u><br>Owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Thermal treatment units.<br><br>Type of Inspection:<br>Self inspection.<br><br>Permit Status:<br>Interim.<br><br>References:<br>40 CFR 265.377(a)(3) for interim status facilities. There are no similar requirements for permitted facilities.<br>Purpose was obtained from 40 CFR 265.370. | The regulations in Subpart P provide the inspection requirements for owners and operators of facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion, except as 265.1 (Purpose, scope and applicability) provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is subject to the requirements of Subpart O if the unit is an incinerator. | At least daily | Elements of Inspection:<br>"The owner or operator must conduct, at a minimum, the following monitoring and inspections when thermally treating hazardous waste: The complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Chemical, physical and biological treatment units other than tanks, surface impoundments and land treatment units.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim.<br><br>References:<br>40 CFR 265.403 for interim status facilities. There are no corresponding requirements-for final status facilities. | To provide for the inspection of certain chemical, physical and biological treatment units. | At least once each operating day.<br><br>At least weekly. | Elements of Instruction:<br>"The owner or operator of a treatment facility must inspect, where present:<br>(1) Discharge control and safety equipment (e.g., waste feed cut-off systems, drainage systems, and pressure relief systems) at least once each operating day, to ensure that it is in good working order,<br>(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day, to ensure that the treatment process or equipment is being operated according to its design,<br>(3) The construction materials of the treatment process or equipment, at least weekly, to detect corrosion or leaking of fixtures or seams, and<br>(4) The construction materials of and the area immediately surrounding discharge confinement structures (e.g., dikes) at least weekly, to detect erosion or obvious signs of leakage, (e.g., wets spots, or dead vegetation)."<br><br>Solutions:<br>As specified by 40 CFR 265.15(c) (General Inspection Requirements), "the owner or operator must remedy any deterioration or malfunction he finds."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

| | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Boilers and industrial furnaces that burn hazardous waste.<br><br>Inspection Type:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 266.102 for permitted burners.<br>40 CFR 266.103 for interim status burners. | To provide inspection requirements for permitted boilers, industrial furnaces and associated equipment. | At least daily.<br><br>At least once every 7 days.<br><br>At least once every 30 days.<br><br>Maintain for not less than 3 years. | Elements of Inspection:<br>"The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:<br>(1) All monitors shall record data in units corresponding to the permit limit unless otherwise specified in the permit,<br>(2) The boiler or industrial furnace and associated equipment (pumps, values, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when it contains hazardous waste at least daily for leaks, spills, fugitive emissions, and signs of tampering, and<br>(3) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every 7 days when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Director that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. At a minimum, operational testing must be conducted at least once every 30 days."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>"These monitoring and inspection data must be recorded and the records must be placed in the operating record required by § 264/265.73 (Operation record). The owner or operator must keep in the operating record of the facility all information and data required by this section for not less than three wars." |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Boilers and industrial furnaces that burn hazardous waste. (Cont.) | | | Personnel:<br>The owner or operator. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Boilers and industrial furnaces that burn hazardous waste.<br><br>. Inspection The:<br>Self inspection.<br><br>Permit Status:<br>Interim or final.<br><br>References:<br>40 CFR 266.111. | To provide inspection requirements during the direct transfer of hazardous waste from the transport vehicle to the boiler or industrial furnace without the use of a storage unit. | At least once each operating hour.<br><br>Maintain for at least 3 years. | Elements of Inspection:<br>"The owner or operator must inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle (container) to the boiler or industrial furnace:<br>(1) 'Overfill/spill control equipment (e.g., waste-fed cutoff systems and drainage systems) to ensure that it is in good working order,<br>(2) The aboveground portions of the direct transfer equipment to detect corrosion, erosion, or releases of wastes (e.g., wet spots, dead vegetation), and<br>**(3)** Data gathered from monitoring equipment to ensure that data equipment is being operated according to its design.<br><br>The owner or operator must inspect cathodic protection systems, if used, to ensure that they are functioning properly according to the schedule provided by § 265.195(b) (Inspections) of this chapter."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>Records of inspections made under this part shall be maintained in the operating record of the facility and made available for inspection at least 3 years from the date of the inspection.<br><br>Personnel<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>New hazardous waste landfills.<br><br>Inspection Type:<br>Self inspection.<br><br>Reference:<br>40 CFR 267.21. | These regulations provide for the inspection by owners and operators of new facilities that dispose of hazardous waste in landfills. | "The landfill must be inspected at a sufficient frequency to assure compliance with § 267.10 (Environmental Performance Standard). | Elements of Inspection:<br>40 CFR 267.10, does not specify any inspection procedures. It does however mandate that all new land treatment facilities be "located, designed, constructed, operated, maintained and closed in a manner that will assure protection of human health and the environment."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Hazardous waste management facilities.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 270.30. | These regulations require the permittee to allow the Director, or an authorized representative, (upon the presentation of credentials and other documents as maybe required by law) to enter and inspect a facility in accordance with the requirements of 40 CFR 270.30. | At reasonable times.<br><br>At reasonable times.<br><br>At reasonable times.<br><br>At reasonable times. | Elements of Inspection:<br>"Enter at reasonable times upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit,<br><br>Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit,<br><br>Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and<br><br>Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA any substances or parameters at any location."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The Director or an authorized representative. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Existing UST systems.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 280.21(a) through (d). | "Not later than December 22, 1998, all existing UST systems must comply with one of the following requirements:<br>(1) New UST system performance standards under § 280.20 (Performance standards for new UST systems);<br>(2) The upgrading requirements found in Elements of Inspection<br>or<br>"(3) Closure requirements under Subpart G of §280, including applicable requirements for corrective action under Subpart F." | Within 10 years after lining, and every 5 years thereafter.<br><br>Monthly. | Elements of Inspection:<br>"Tank upgrading requirements. Steel tanks must be upgraded to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory<br>(1) Interior lining. A tank maybe upgraded by internal lining if:<br>(i) The lining is installed in accordance with the requirements of §280.33 (Repairs allowed), and<br>(ii) Within 10 years after lining, and every 5 years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications.<br>(2) Cathodic protection. A tank maybe upgraded by cathodic protection if the cathodic protection system meets the requirements of § 280.20(a)(2) (ii), (iii), and (iv) (Performance Standards for new UST systems) and the integrity of the tank is ensured using one of the following methods:<br>(i) The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes prior to installing the cathodic protection system; or<br>(ii) The tank has been installed for less than 10 years and is monitored monthly for releases in accordance with § 280.43(d) through (h) (Methods of release detection for tanks); or<br>(iii) The tank has been installed for less than 10 years and is assessed for corrosion holes by conducting two |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Existing UST systems. (Cont.) | | Between 3 and 6 months. | tightness tests that meet the requirements of § 280.43(c). The first tightness test must be conducted prior to installing the cathodic protection system. The second tightness test must be conducted between three (3) and six (6) months following the first operation of the cathodic protection system, or<br>(iv) The tank is assessed for corrosion holes by a method that is determined by the implementing agency to prevent releases in a manner that is no less protective of human health and the environment than paragraphs (i) through (iii) of this section.<br>(3) Internal lining combined with cathodic protection. A tank may be upgraded by both internal lining and cathodic protection if:<br>(i) The lining is installed in accordance with the requirements of § 280.33 (Repairs allowed); and<br>(ii) The cathodic protection system meets the requirements of § 280.20(a)(2) (ii), (iii), and (iv) (Performance systems for new UST systems).'<br><br>"[Note: The following codes and standards may be used to comply with this section:<br>(A) American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks";<br>(B) National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10-Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Existing UST systems. (Cont.) | | | of Cathodic Protection";<br>(C) National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems"; and<br>(D) American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems.]"<br><br>"Piping upgrading requirements. Metal piping that routinely contains regulated substances and is in contact with the ground must be catholically protected in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and must meet the requirements of § 280.20(b)(2) (ii), (iii), and (iv). The codes and standards listed in the" preceding note "may be used to comply with this requirement."<br><br>"Spill and overfill prevention equipment. To prevent spilling and overfilling associated with product transfer to the UST system, all existing UST systems must comply with new UST system spill and overfill prevention equipment requirements specified in § 280.20(c)."<br><br>Solutions:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Existing UST systems. (Cont.) | | | Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Steel UST systems with corrosion protection.<br><br>Inspection Type:<br>Self inspection.<br><br>Reference:<br>40 CFR 280.31. | "To ensure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances.' | | Elements of Inspection:<br>"All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground."<br><br>"All UST systems equipped with cathodic protection systems must be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements: |
| | | Within 6 months of installation and at least every 3 years thereafter. | All cathodic protection systems must be tested within 6 months of installation and at least every 3 years thereafter or according to another reasonable time frame established by the implementing agency. The criteria that are used to determine that cathodic protection is adequate as required by this section must be in accordance with a code of practice developed by a nationally recognized association."<br><br>"[Note: National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems;" maybe used to comply" with the above paragraph]. |
| | | Every 60 days. | "UST systems with impressed current cathodic protection systems must also be inspected every 60 days to ensure the equipment is running properly." |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Steel UST systems with corrosion protection. (Cont.) | | | Solutions:<br>None specified.<br><br>Inspection Reports:<br>"For UST systems using cathodic protection, records of the operation of the cathodic protection must be maintained in accordance with §280.34 (Reporting and recordkeeping) to demonstrate compliance with the performance standards in this section. These records must provide the following<br>(1) The results of the" last three inspections required in the" fourth paragraph of Elements of Inspection;" and<br>"(2) The results of testing from the last two inspections required" in the second paragraph of Elements of Inspection.<br><br>Personnel:<br>Qualified cathodic protection tester. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>UST systems.<br><br>Inspection Type:<br>Self inspection.<br><br>Reference:<br>40 CFR 280.33(a) through (f). | To provide requirements that owners and operators of UST systems must follow to ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. | | Elements of Inspection:<br>"The repairs must meet the following requirement:<br>Repairs to UST systems must be properly conducted in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory."<br><br>"[Note: The following codes and standards may be used to comply with the above paragraph: National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"; American Petroleum Institute Publication 2200, "Repairing Crude Oil, Liquified Petroleum Gas, and Product Pipelines"; American Petroleum Institute Publication 1631, 'Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks"; and National Leak Prevention Association Standard 631, "Spill Prevention, Minimum 10-Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection.]"<br><br>"Repairs to fiberglass-reinforced plastic tanks may be made by the manufacturer's authorized representatives or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory."<br><br>"Metal pipe sections and fittings that have released product as a result of corrosion or other damage must be replaced. Fiberglass pipes and fittings may be repaired in accordance with the manufacturer's specifications."<br><br>"Repaired tanks and piping must be tightness tested in |

| Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|
| UST systems. (Cont.) | | accordance with § 280.43(c) (Methods of release detection for tanks) and § 280.44(b) (Methods of release detection for piping) |
| | Within 30 days. | within 30 days following the date of the completion of the repair except as provided in" sections (1) through (3) below<br>"(1) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory, or |
| | Monthly. | (2) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in § 280.43(d) through (h); or |
| | | (3) Another test method is used that is determined by the implementing agency to be no less protective of human health and the environment than those listed above." |
| | Within 6 months. | "Within 6 months following the repair of any catholically protected UST system, the cathodic protection system must be tested in accordance with § 280.31(b) and (c) (Operational and maintenance of corrosion protection) to ensure that it is operating properly." |
| | | Inspection Reports:<br>'UST system owners and operators must maintain records of each repair for the remaining operating life of the UST system that demonstrate compliance with the requirements of this section." |
| | | Personnel:<br>UST system owners and operators. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Petroleum UST systems.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 280.41. | This section provides 'monitoring requirements" for petroleum UST systems, but they have been included as they meet this handbook's definition of inspection. | At least every 30 days.<br><br>At least every 5 years.<br><br>Monthly.<br><br>Weekly. | Elements of Inspection:<br>"Owners and operators of petroleum UST systems must provide release detection for tanks and piping as follows:"<br><br>"Tanks. Tanks must be monitored at least every 30 days for releases using one of the methods listed in § 280.43(d) through (h) (Methods of release detection for tanks) except that:<br>(1) UST systems that meet the performance standards in § 280.20 (Performance standards for new UST systems) or § 280.21 (Upgrading of existing of UST systems), and the monthly inventory control requirements in §280.43 (a) or (b), may use tank tightness testing (conducted in accordance with § 280.43(c)) at least every 5 years until December 22, 1998, or until 10 years after the tank is installed or upgraded under § 280.21(b), whichever is later;<br>(2) UST systems that do not meet the performance standards in § 280.20 or § 280.21 may use monthly inventory controls (conducted in accordance with § 280.43(a) or (b)) and annual tank tightness testing (conducted in accordance with § 280.43(c)) until December 22, 1998 when the tank must be upgraded under § 280.21 or permanently closed under §280.71 (Permanent closure and changes in service); and<br>(3) Tanks with capacity of 550 gallons or less may use weekly tank gauging (conducted in accordance with § 280.43(b))."<br><br>"Piping. Underground piping that routinely contains regulated substances must be monitored for releases in a manner that meets one of the following requirements: |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Petroleum UST systems. (Cont.) | | | (1) Pressurized piping. Underground piping that conveys regulated substances under pressure must:<br>(i) Be equipped with an automatic line leak detector conducted in accordance with § 280.44(a) (Methods of release detection for piping), and<br>(ii) Have an annual line tightness test conducted in accordance with § 280.44(b) or have monthly monitoring conducted in accordance with § 280.44(c). |
| | | At least every 3 years. | (2) Suction piping. Underground piping that conveys regulated substances under suction must either have a line tightness test conducted at least every 3 years and in accordance with § 280.44(b), or use a monthly monitoring method conducted in accordance with § 280.44(c). No release detection is required for suction piping that is designed and constructed to meet the following standards:<br>(i) The below-grade piping operates at less than atmospheric pressure,<br>(ii) The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released,<br>(iii) Only one check valve is included in each suction line,<br>(iv) The check valve is located directly below and as close as practical to the suction pump, and<br>(v) A method is provided that allows compliance with paragraphs (ii) -(iv) of this section to be readily determined." |

**INSPECTION REQUIREMENTS UNDER RCRA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Petroleum or hazardous substance UST systems.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 280.62. | This section provides that" owners and operators of petroleum or hazardous substance UST systems must, in response to a confirmed release from the UST system, comply with the requirements of Subpart F, (Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances) except for USTs excluded under 280.10(b) (Applicability) and UST systems subject to RCRA Subtitle C corrective action requirements under section 3004(u) of RCRA." | Upon confirmation of a release.<br><br>Immediately. | Elements of Inspection:<br>"In response to a confirmed release from a UST system owners and operators must visually inspect any aboveground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and ground water."<br><br>Solutions:<br>"Take immediate action to prevent any further release of the regulated substance into the environment, and identify and mitigate fire, explosion and vapor hazards."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The owner or operator. |

## INSPECTION REQUIREMENTS UNDER RCRA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>State compliance inspection.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 271.15 (b)(2),(3), and (4), (c) and (d). | "State programs shall have inspection and surveillance procedures to determine, independent of information supplied by regulated persons, compliance or noncompliance with applicable program requirements." | Periodic. | Elements of Inspection:<br>The State shall maintain a program for periodic inspections of the facilities and activities subject to regulation. "These inspections shall be conducted in a manner designed to:<br>(1) Determine compliance or non-compliance with issued permit conditions and other program requirements,<br>(2) Verify the accuracy of information submitted by permitters and other regulated persons in reporting forms and other forms supplying monitoring data, and<br>(3) Verify the adequacy of sampling, monitoring, and other methods used by permitters and other regulated persons to develop that information.<br><br>"The State shall maintain a program for investigating information obtained regarding violations of applicable program and permit requirements."<br><br>"The State shall also maintain procedures for receiving and ensuring proper consideration of information submitted by the public about violations. Public effort in reporting violations shall be encouraged, and the State Director shall make available information on reporting procedures"<br><br>The State Director and State officers engaged in compliance evaluation shall have authority to enter any site or premises subject to regulation or in which records relevant to program operation are kept in order to copy any records, inspect, monitor or otherwise investigate compliance with the State program including compliance with permit conditions and other program |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| State compliance inspection. (Cont.) | | | requirements. States whose law requires a search warrant before entry conform with this requirement."<br><br>"Investigatory inspections shall be conducted, samples shall be taken and other information shall be gathered in a manner (e.g., using proper "chain of custody" procedures) that will produce evidence admissible in an enforcement proceeding or in court."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The State Director and State officers. |

**INSPECTION REQUIREMENTS UNDER RCRA**

| **General Information** | Purpose | **Scheduling** Requirements | **Required Procedures** |
|---|---|---|---|
| Regulatory Activity:<br>State UST inspection programs.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 281.40. | To provide authority for State inspection programs. | None specified. | Elements of Inspection:<br>"Any authorized representative of the" state engaged in compliance inspections, monitoring, and testing must have authority to obtain by request any information from an owner or operator with respect to the UST system(s) that is necessary to determine compliance with the regulations."<br><br>"Authorized representatives must have the authority to enter any site or premises subject to UST system regulations or in which records relevant to the operation of the UST system(s) are kept, and to copy these records, obtain samples of regulated substance, and inspect or conduct the monitoring or testing of UST system(s)."<br><br>"State programs must have inspection procedures to determine, independent of information supplied by regulated persons, compliance with program requirements, and must provide for enforcement of failure to comply with the program requirements. States must maintain a program for systematic inspections of facilities subject to regulations in a manner designed to determine compliance or non-compliance, to verify accuracy of information submitted by owners or operators of regulated USTs, and to verify adequacy of methods used by owners or operators in developing that information."<br><br>"When inspections are conducted, samples taken, or other information gathered, these procedures must be conducted in a manner (for example, using proper "chain of custody" procedures) that will produce evidence admissible in an enforcement |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| State UST inspection programs. (Cont.) | | | proceeding, or in court.'<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>"The state program must maintain the data collected through inspections and evaluation of records in such a manner that the implementing agency can monitor over time the compliance status of the regulated community. Any compilation, index, or inventory of such facilities and activities shall be made available to EPA upon request."<br><br>Personnel:<br>Authorized representatives of a state. |

# PART IV

# COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)

## The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

Purpose: CERCLA as amended, (commonly known as Superfund) was created to provide for: (1) the identification of uncontrolled hazardous waste sites that may release or have released hazardous substances into the environment, (2) the remediation of such sites by responsible parties or the government, (3) the assessment of damage to natural resources resulting from such releases, and (4) establishment of a claims procedure by which funds spent restoring natural resources or remediating sites can be recouped from responsible parties. The framework for CERCLA implementation is the National Contingency Plan (NCP) found in 40 CFR 300.

In response to the lack of progress perceived by Congress in the remediation program under the first five years of CERCLA the Superfund Amendments and Reauthorization Act (SARA) was passed in October 1986. SARA extended both the funding of the Superfund program and its duration, created a new fund to support the remediation of leaking underground storage tanks, and set more stringent remedial standards for contaminated site restoration.

Application to DOE: Section 120 (Federal Facilities) requires that each Federal department be subject to the requirements of CERCLA in the same manner and to the same extent as any non-governmental entity, including liability under Section 107 of CERCLA. State laws concerning removal and remedial action, including State laws regarding enforcement, apply to facilities owned or operated by a Federal department unless the facility is on the National Priorities List.

Inspection Authorities: Section 104(e) (Information Gathering and Access) provides that "any officer, employee or representative of the President, duly designated by the President" or "any duly designated officer, employee, or representative of a State or political subdivision under a contract or cooperative agreement under CERCLA 104 (d)(l)" is authorized "to inspect and obtain samples from any vessel, facility, establishment or other place or property referred to in paragraph 3 [of Section 104(e)] or from any location of any suspected hazardous substance or pollutant or contaminant. Any such officer, employee or representative is also authorized to inspect and obtain samples of any containers or labeling for suspected hazardous substances or pollutants or contaminants." Such entry, however, shall be only for reasons such as

determining if a need for response action exists or selecting such response, and only shall be allowed under CERCLA if there is a reasonable indication that a release of a hazardous substance or threat thereof may exist.

Exemption: Section 120 (j) of CERCLA allows the President of the United States to issue orders exempting response actions at specific DOE and DOD facilities as necessary to protect the national security interest of the United States.

Assistance: DOE staff and contractors who have questions concerning CERCLA may contact the Office of Environmental Guidance, RCRA/CERCLA Division (EH-231) at (FTS) 896-6374 or (202) 586-6374 or the designated compliance coordinator in the Office of Environmental Compliance (EH-22) at (FTS) 896-2113 or (202) 586-2113. In addition, EPA maintains a RCRA/CERCLA Hotline that operates Monday - Friday, 8:30 a.m. -7:30 p.m. (EST) at (800) 424-9346 or (703) 920-9810.

## — Comprehensive Environmental Response Compensation and Liability Act — (CERCLA)

*CERCLA inspection requirements are more activity specific, (site evaluations, removal activities etc.) rather than facility specific, although there is* **one** *inspection requirement which covers vessels and facilities. Fire Department inspections offacilities which have submitted inventory forms under 40 CFR 370 are also included.*

## Activities with Inspection Requirements

- Health and Safety Inspections by OSHA at Hazardous Waste sites
- Preliminary Assessments
- Removal Site Evaluations
- Remedial Site Evaluations
- Remedial Action Construction Sites

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Hazardous waste site inspection.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 300.175. | To assure that the health and safety of employees at hazardous waste sites are being protected. | In response to: (1) requests from EPA or the lead agency, (2) accidents, (3) employee complaints, or (4) Occupational Safety and Health Administration (OSHA) initiative. | Elements of Institution:<br>"The Department of Labor (DOL), through the OccupationaI Safety and Health Administration (OSHA) and the states' operating plans approved under § 18 of the Occupational Safety and Health Act of 1970, has authority to conduct safety and health inspections of hazardous waste sites to assure that employees are being protected and to determine if the site is in compliance with:<br>(1) Safety and health standards and regulations promulgated by OSHA (or the states) in accordance with § 126 of SARA and all other applicable standards; and<br>(2) Regulations promulgated under the OSH Act and its general duty clause."<br><br>"OSHA inspections may be self-generated, consistent with its program operations and objectives, or maybe conducted in response to requests from EPA or another lead agency. OSHA may also conduct inspections in response to accidents or employee complaints. OSHA may also conduct inspections at hazardous waste sites in those states with approved plans that choose not to exercise their jurisdiction to inspect such sites On request, OSHA will provide advice and assistance to EPA and other NRT/RRT (National Response Team/Regional Response Team) agencies as well as to the OSC/RPM (On-Scene Coordinator/Remedial Project Manager) regarding hazards to persons engaged in response activities. Technical assistance may include review of site safety plans and work practices, assistance with exposure monitoring, and help with other compliance questions. OSHA may also take any other action necessary to |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Hazardous waste site inspection. (Cont.) | | | assure that employees are properly protected at such response activities. **Any** questions about occupational safety and health at these sites should be referred to the OSHA Regional Office."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER CERCLA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Preliminary assessment inspection.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 300.305. | To augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate. | Promptly upon receipt of a notification of a discharge. | Elements of Inspection:<br>"The preliminary assessment shall be conducted using available information, supplemented where necessary and possible by an on-scene inspection. The on-scene coordinator (OSC) shall undertake actions to:<br>(1) Evaluate the magnitude and severity of the discharge or threat to public health or welfare or the environment,<br>(2) Assess the feasibility of removal,<br>(3) To the extent practicable, identify potentially responsible parties, and<br>(4) Ensure that authority exists for undertaking additional response actions."<br><br>Solutions:<br>"The OSC, in consultation with legal authorities when appropriate, shall make a reasonable effort to have the discharger voluntarily and promptly perform removal actions."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The OSC is responsible for promptly initiating a preliminary assessment. |

**INSPECTION REQUIREMENTS UNDER CERCLA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Compliance inspections.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 300.400(d). | For purposes of determining the need for response, or choosing or taking a response action, or otherwise enforcing the provisions of CERCLA | If consent to enter a facility or vessel is not granted under the authorities described in 40 CFR 300.400 (d) (l). | Elements of Inspection:<br>"If consent is not granted under the authorities described in 40 CFR 300.400(d)(l), or if consent is conditioned in any manner, EPA, or the appropriate Federal agency, may issue an order pursuant to § 104(e)(5) of CERCLA directing compliance with the request for access made under § 300.400(d)(l). EPA **or the** appropriate federal agency may ask the Attorney General to commerce a civil action to compel compliance with either a request for access or an order directing compliance."<br><br>"EPA reserves the right to proceed, where appropriate, under applicable authority other than CERCLA § 104(e)."<br><br>"The administrative order may direct compliance with a request to enter or inspect any vessel, facility, establishment, place, property, or location described in 40 CFR 300.400(d) (2)."<br><br>Solutions:<br>'If consent is not granted under the authorities described in paragraph (d)(1) of 40 CFR 300.400, or if consent is conditioned in any manner, EPA, or the appropriate Federal agency, may issue an order pursuant to § 104(e)(5) of CERCLA directing compliance with the request for access made under § 300.400(d)(l). EPA or the appropriate Federal agency may ask the Attorney General to commence a civil action to compel compliance with either a request for access or an order directing compliance. |

**INSPECTION REQUIREMENTS UNDER CERCLA**

| **General Information** | **Purpose** | **Scheduling Requirements** | **Required** Procedures |
|---|---|---|---|
| Compliance inspections. (Cont.) | | | Inspection Reports:<br>None specified.<br><br>Personnel:<br>"The lead agency may designate as its representative solely for the purpose of access, among others, one or more potentially responsible parties, including representatives, employees, agents, and contractors of such parties. EPA, or the appropriate Federal agency, may exercise the authority contained in § 104(e) of CERCLA to obtain access for its designated representative. A potentially responsible party may only be designated as a representative of the lead agency where that potentially responsible party has agreed to conduct response activities pursuant to an administrative order or consent decree." |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Removal site evaluations.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 300.410. | To obtain requisite information for the removal site evaluation. | During a removal site evaluation. | Elements of Inspection:<br>"A removal site evaluation includes a removal preliminary assessment and, if warranted, a removal site inspection."<br><br>"A removal site inspection may be performed if more information is needed. Such inspection may include a perimeter (i.e., off-site) or on-site inspection, taking into consideration whether such inspection can be performed safely."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>The results of the removal site evaluation shall be documented.<br><br>Personnel:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Remedial site evaluation.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 300.420. | To collect data, as required, and evaluate releases of hazardous substances, pollutants, or contaminants. | As part of the remedial site evaluation. | Elements of Inspection:<br>"The lead agency shall perform a remedial site inspection (SI) as appropriate to:<br>(1) Eliminate from further consideration those releases that pose no significant threat to public health or the environment;<br>(2) Determine the potential need for removal action;<br>(3) Collect or develop additional data, as appropriate, to evaluate the release pursuant to the HRS, and<br>(4) Collect data in addition to that required to score the release pursuant to the HRS, as appropriate, to better characterize the release for more effective and rapid initiation of the RI/FS or response under other authorities."<br><br>"The remedial SI shall build upon the information collected in the remedial PA. The remedial SI shall involve, as appropriate, both on- and off-site field investigatory efforts, and sampling."<br><br>"Prior to conducting field sampling as part of site inspections, the lead agency shall develop sampling and analysis plans that shall provide a process for obtaining data needs. The sampling and analysis plans shall consist of two parts:<br>(1) The field sampling plan, which describes the number, type, and location of samples, and the type of analyses, and<br>(2) The quality assurance project plan (QAPP), which describes policy, organization, and functional activities, and the data quality objectives and measures necessary to achieve adequate data for use in site evaluation and hazard ranking system activities." |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Remedial site evaluation. (Cont.) | | | Solutions:<br>"If the remedial SI indicates that removal action maybe appropriate, the lead agency shall initiate. removal site evaluation pursuant to § 300.410." (see pg. 85)<br><br>Inspection Reports:<br>"Upon completion of a remedial SI, the lead agency shall prepare a report that includes the following<br>(1) **A** description/history/nature of waste handling,<br>(2) A description of known contaminants,<br>(3) A description of pathways of migration of contaminants,<br>(4) An identification and description of human and environmental targets, and<br>(5) **A** recommendation on whether further action is warranted."<br><br>Personnel:<br>Lead agency personnel. |

**INSPECTION REQUIREMENTS UNDER CERCLA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Remedial site evaluations.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 **CFR** 300.515(g). | To provide for a determination that the remedy has been constructed in accordance with the record of decision (ROD) and with the remedial design. | At the conclusion of the remedial action. | Elements of Inspection:<br>"For Fund-financed remedial actions, the lead and support agencies shall conduct a joint inspection at the conclusion of construction of the remedial action to determine that the remedy has been constructed in accordance with the ROD and with the remedial design."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>"The administrative record file for the selection of a response action typically, but not in all cases, will contain the following types of documents: . . . inspection reports . ..".<br><br>Personnel:<br>Lead and support agency personnel. |

## INSPECTION REQUIREMENTS UNDER CERCLA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Fire department inspections.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 370.25(d). | To allow on-site inspection by the tire department. | After a facility owner or operator has submitted an inventory form under, 40 CFR 370. | Elements of Inspection:<br>"Fire department inspection. The owner or operator of a facility that has submitted an inventory form under this section shall allow on-site inspection by the fire department having jurisdiction over the facility upon request of the department, and shall provide to the department specific location information on hazardous chemicals at the facility."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER CERCLA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping:<br>Toxic chemical release reporting.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 372.1O(C). | To allow EPA to inspect supporting material for Toxic Chemical Inventory Form submissions. | At the request of the regulatory authority. | Elements of Inspection:<br>Records retained under this section must be maintained at the facility to which the report applies or from which a notification was provided. Such records must be readily available for purposes of inspection by EPA.<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

# PART V

# CLEAN AIR ACT (CAA)

Clean Air Act
(CAA)

Purpose: The Clean Air Act is designed to protect and enhance the quality of air in the United States through air pollution control and prevention. In its current form the Act emphasizes the restoration of air quality in urban areas through the regulation of motor vehicle emissions and stationary industrial source emissions, and the prevention of deterioration of air quality where air quality exceeds regulatory standards. Clean Air Act regulations are primarily implemented through permits and State implementation plans. Amendments to the Clean Air Act were recently approved by Congress. These amendments will add stringent new restrictions on stationary and mobile source emissions. DOE facilities need to track EPA's regulatory actions to ensure continuing compliance at their facilities.

Application to DOE: According to Section 118 of the Clean Air Act, each department of the Federal Government "(l) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge of air pollutants, shall be subject to and comply with all Federal, State, interstate, and local requirements, administrative authorities, and processes and sanctions respecting the control and abatement of air pollution in the same manner as any non-governmental entity." The preceding sentence applies: "(A) to any requirement (including any recordkeeping or reporting requirement, any requirement respecting permits, and any other requirement whatsoever), (B) to any requirement to pay a fee or charge imposed by any State or local agency to defray the cost of its air pollution regulatory program, (C) to the exercise of any Federal, State, or local administrative authority, and (D) to any process or sanction, whether enforced in Federal, State, or local courts or in any other manner."

Exemptions: Section l12(i)(4) (National Emission Standards for Hazardous Air Pollutants - Schedule for Compliance: Presidential Exemption) of the Clean Air Act states that the President may exempt any stationary source from compliance with the requirements of Section 112 "for a period of not more than two years if the President finds that the technology to implement such standards is not available and that such action is in the national security interest of the U.S. This exemption may be extended for one or more additional periods, each period not to exceed two years."

Under Section 118 (Control of Pollution from Federal Facilities), the

President may exempt any emission source from compliance with such a requirement in Section 118 if the President determines it to be in the paramount interest of the United States to do so, except that no exemption may be granted from Section 111 (Standards of Performance for New Stationary Sources), and an exemption from Section 112 maybe granted only in accordance with Section 112(i)(4). Section 118 also adds that no such exemption shall be granted due to a lack of appropriation by Congress if the President specifically requested those funds. Any exemption shall not exceed one year, but additional exemptions may be granted for periods not to exceed one year based on new determinations by the President. The President may also exempt items which are uniquely military in nature.

Inspection Authorities: Section 114 (Inspections, Entry, and Monitoring) of the Clean Air Act provides for the entry and inspection of facilities by the Administrator. The Administrator may have access to and make copies of records, inspect any monitoring equipment, or sample any regulated emission.

Assistance: DOE staff and contractors who have questions concerning the CAA may contact the Office of Environmental Guidance, Air, Water and Radiation Division (EH-232) at (FTS) 896-2409 or (202) 586-2409, or the designated compliance coordinator in the Office of Environmental Compliance (EH-22) at (FTS) 896-2113, or (202) 586-2113.

*CAA inspection requirements are facility specific. However the CAA also provides for inspections by regulatory authorities.*

## Facilities with Inspection Requirements

- Petroleum Liquid Storage Vessels
- Volatile Organic Liquid Storage Vessels
- Bulk Gasoline Storage Vessels

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Air pollution sources.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 51.230(e). | To determine whether air pollution sources are in compliance with applicable laws. | When requested by the State. | Elements of Inspection:<br>"Each implementation plan must show that the State has legal authority to carry out the plan, including authority to:<br>Obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require recordkeeping and to make inspections and conduct tests of air pollution sources."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER CAA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Air pollution sources.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 60.11(d). | To provide that at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. | When requested by the administering agency. | Elements of Inspection:<br>"Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator" of the EPA "which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>The owners and operators of facilities and the Administrator of EPA. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Storage vessels for petroleum liquids.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 60.l13a(a). | To provide for the inspection of external floating roof gap areas between the primary seal and the tank wall and between the secondary seal and the tank wall. | Within 60 days of initial fill.<br>At least once every five years thereafter.<br>As rapidly as possible. | Elements of Inspection:<br>"For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Volatile organic liquid storage vessels including petroleum liquid storage vessels.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 60.l12b (a)(3)(i). | To provide for the inspection of closed vent system emissions. | None specified. | Elements of Inspection:<br>"The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b) (Test methods and procedures)."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Volatile organic liquid storage vessels including petroleum liquid storage vessels.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 60.l13b(a).<br>The information 'for Inspection Reports was obtained from 40 CFR l15b(a)(2), (3), and (4). | To provide for inspections conducted after the installation of the control equipment required to meet the requirements of 40 CFR 60.l12b(a)(l) (permanently affixed roof and internal floating roof). | At least once every 12 months.<br><br>Within 45 days. | Elements of Inspection:<br>"After installing the control equipment required to meet § 60.112b(a)(l) the owner or operator shall:<br>(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel."<br><br>"For vessels equipped with a liquid-mounted or mechanical shoe primary seal:<br>(1) Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator of the EPA in the inspection report required in § 60.l15b(a)(3)" (see Inspection Report) below. "Such a request for an extension must document that alternate storage capacity is unavailable |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Volatile organic liquid storage vessels including petroleum liquid storage vessels. (Cont.) | | | and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible."<br><br>"For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(l)(ii) (B):<br>(1) Visually inspect the vessel as specified below at least every 5 years, or<br>(2) Visually inspect the vessel as specified in the" second paragraph of Elements of Inspection."<br><br>"Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with **VOL.** In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in the second paragraph of Elements of Inspection and at intervals no greater than 5 years in the case of vessels specified" in the third paragraph of this section. |
| | | At least every 5 years. | |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Volatile organic liquid storage vessels including petroleum liquid storage vessels. (Cont.) | | At least 30 days prior to the filling, or refilling of each storage vessel. | "Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by" the first and fourth paragraphs of Elements of Inspection to "afford the Administrator the opportunity to have an observer present. If the inspection required by" the fourth paragraph of Elements of Inspection" is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator of the EPA at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling."<br><br>Solutions:<br>See the fourth paragraph of Elements of Inspection.<br><br>Inspection Report:<br>"Keep a record of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings)."<br><br>"If any of the conditions described in" the second paragraph of Elements of Inspection" are detected during the annual visual inspection, a report shall be furnished to the Administrator |
| | | At least 7 days prior to the refilling of the storage vessel. | |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Volatile organic liquid storage vessels including petroleum liquid storage vessels. (Cont.) | | 'Within 30 days of the inspection. | within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made." |
| . | | | "After each inspection required by" the third paragraph of Elements of Inspection "that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in" the second paragraph of Elements of Inspection", a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 61.112b(a)(l) (Standard for volatile organic compounds) or" the third paragraph of Elements of Inspection" and list each repair made. |
| | | Within 30 days of the inspection. | Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Volatile organic liquid (VOL) storage vessels.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 60.l13b(a).<br>The paragraph from Inspection Report was obtained from 60.l15(b)(4). | To provide for the inspection of external floating roofs. | During the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least every 5 years thereafter.<br>Within 60 days of the initial fill with VOL and at least one year thereafter. | Elements of Inspection:<br>"After installing the control equipment required to comply with 40 CFR 60.l12b(a)(2) (Standards for volatile organic compounds), the owner or operator shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency<br>(1) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial till with VOL and at least every 5 years thereafter.<br>(2) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least one year thereafter.<br>(3) If any source ceases to store VOL for a period of one year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for purposes of" items (1) and (2) above.<br><br>"Determine gap widths and areas in the primary and secondary seals individually by the following procedures<br>(1) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.<br>(2) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Volatile organic liquid (VOL) storage vessels. (Cont.) | | | (3) The total surface area of each gap described in (2) shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance."<br><br>"Make necessary repairs or empty the storage vessel <u>within 45 days</u> of identification in any inspection for seals not meeting the requirements listed below<br>"(1) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.<br>(i) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.<br>(ii) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.<br>(ii) The secondary seal is to meet the following requirements:<br>(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in" item (3) of the second paragraph above."<br>(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. |
| | | Within 45 days. | |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Volatile organic liquid (VOL) storage vessels. (Cont.) | | | "Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed."<br><br>Solutions:<br>"If the external roof described in" the fourth paragraph of Elements of Inspection" has defects, the primary seal has holes, tears, or other openings in the seal, or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal, or seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before tilling or refilling the storage vessel with VOL."<br><br>Inspection Report:<br>"If a failure that is detected during inspections required" in the first paragraph of Elements of Inspection "cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in § 60.l15b(b)(4) (Reporting and recordkeeping requirements). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.<br><br>"For all the inspections required by" the fourth paragraph of Elements of Inspection "the owner or operator shall notify the |
| | | Within 45 days of the inspection. | |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Volatile organic liquid (VOL) storage vessels. (Cont.) | | 30 days prior to the filling or refilling of the vessel. | Administrator in writing at least 30 days prior to refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling." |
| | | At least 7 days prior to the refilling. | |
| | | Within 30 days. | "After each seal gap measurement that detects gaps exceeding the limitations specified by 40 CFR 60.l13b(b)(4), the third paragraph of Elements of Inspection, submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in 40 CFR 60.113b(b)(2) and the date the vessel was emptied or the repairs made and date of repair."<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER CAA**

| **General Information** | Purpose | **Scheduling** Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Bulk gasoline terminals.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 60.502(j). The information for Inspection Reports was obtained from 40 CFR 60.505(c) (Reporting and recordkeeping). | To provide for bulk gasoline emission detection. | Each calendar month.<br><br>Within 15 calendar days.<br><br>Keep on file at terminal for at least 2 years. | Elements of Inspection:<br>"Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable."<br><br>Solutions:<br>"Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected."<br><br>Inspection Report:<br>A record of each monthly leak inspection required under § 60.502(j) shall be kept on file at the terminal for at least 2 years. Inspection records shall include, as a minimum, the following information:<br>(1) Date of inspection.<br>(2) Findings (may indicate no leaks discovered, or location, nature, and severity of each leak).<br>(3) Leak determination method.<br>(4) Corrective action (date each leak was repaired; reasons for any repair interval in excess of 15 days).<br>(5) Inspector name and signature.'<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>State inspection authority.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 60.26(a). | To determine whether designated facilities are in compliance with applicable laws, regulations, standards, and compliance schedules. | Upon request by the regulatory authority. | Elements of Inspection:<br>Each State plan for designated facilities "shall show that the State has legal authority to...obtain information necessary to determine whether designated facilities are in compliance with applicable laws, regulations, standards, and compliance schedules, including authority to require recordkeeping and to make inspections and conduct tests of designated facilities."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping:<br>Continuous emission monitoring system (CEMS) data from Municipal Waste Combustors.<br><br>Regulated Unit:<br>Municipal waste combustors.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40. CFR 60.59a(h). | Records of continuous emission monitoring system (CEMS) data. | At least 2 years after date of recordation.<br><br>At least 2 years after date of review. | Elements of Inspection:<br>"Records of CEMS data for opacity, sulfur dioxide, nitrogen oxides, and carbon monoxide, load level data, and particulate matter control device temperature data shall be maintained for at least 2 years after date of recordation and be made available for inspection upon request."<br><br>"Records showing the names of persons who have completed review of the operating manual, including the date of the initial review and all subsequent annual reviews, shall be maintained for at least 2 years after date of review and be made available for inspection upon request."<br><br>Solution:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping:<br>Continuous emission monitoring system (CEMS) data.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR Part 60, Appendix F, § 3. | Quality control procedures for CEMS. | Upon request. | "Each source owner or operator must develop and implement a QC program. As a minimum, each QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:<br>(1) Calibration of CEMS.<br>(2) CD determination and adjustment of CEMS.<br>(3) Preventive maintenance of CEMS (including spare parts inventory).<br>(4) Data recording, calculations, and reporting.<br>(5) Accuracy audit procedures including sampling and analysis methods.<br>(6) Program of corrective action for malfunctioning CEMS."<br><br>"These written procedures must be kept on record and available for inspection by the enforcement agency."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping:<br>Reports from sewage treatment plants.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 60.153(b). | Recordkeeping. | Upon request.<br><br>Retain and make available for inspection by Administrator for minimum of 2 years. | Elements of Inspection:<br>None specified.<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>"The owner or operator of any multiple hearth, fluidized bed, or electric sludge incinerator subject to the provisions of this subpart shall retain the following information and make it available for inspection by the Administrator for a minimum of 2 years:<br>(1) For incinerators equipped with a wet scrubbing device, a record of the measured pressure drop of the gas flow through the wet scrubbing device, as required by 40 CFR 60.153(b)(l).<br>(2) A record of the measured oxygen content of the incinerator exhaust gas, as required by 40 CFR 60.153(b)(2).<br>(3) A record of the rate of sludge charged to the incinerator, the measured temperatures of the incinerator, the fuel flow to the incinerator, and the total solids and volatile solids content of the sludge charged to the incinerator, as required by 40 CFR 60.153(a)(l), (b)(3), (b)(4), and (b)(5)."<br><br>Personnel:<br>The owner or operator. |

**INSPECTION REQUIREMENTS UNDER CAA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping:<br>Records from bulk gasoline terminals.<br><br>Regulated Unit:<br>Bulk gasoline terminals.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 60.505. | Compliance with reporting and recordkeeping. | Upon request. | Elements of Inspection:<br>"The tank truck vapor tightness documentation required under 40 CFR 60.502(e)(l) (Standard for Volatile. Organic Compound (VOC) emissions from bulk gasoline terminals) shall be kept on file at the terminal in a permanent form available for inspection."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER THE CAA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Solvent cleaning machines.<br><br>Type of Inspection:<br>Self inspection.<br><br>References:<br>40 CFR 63.463. | These regulations provide the inspection requirements needed to comply with the National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning. | If an enclosure (full or partial) is used to achieve a reduced room draft, the owner or operator shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the wind s peed within the enclosure using the procedure specified in 40 CFR 63.463(d)(2)(i) and (d)(2)(ii), and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes, or other defects. | Elements of Inspection:<br>"If a cover (working- mode, downtime- mode, and/ or idling-mode cover) is used to com ply with these standards, the owner or operator shall conduct a visual ins pection to determine if the cover is opening and closin g properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>Owner or operator. |

# PART VI

# ATOMIC ENERGY ACT (AEA)

# Atomic Energy Act
# (AEA)

**Purpose:** The Atomic Energy Act of 1954, as amended, sets the policy for the development and use of atomic energy. It provides programs for the control by the Government of the possession, use, and production of atomic energy and special nuclear material.

**Application to DOE:** Regulations implementing the Atomic Energy Act are found in volume 10 of the Code of Federal Regulations (CFR). There are several sections within 10 CFR that may be applicable to DOE facilities, and two which have been identified as being applicable to DOE facilities.

Those sections that pertain specifically to DOE are 10 CFR 60 and 10 CFR 72. Part 60 of 10 CFR describes the requirements for licensing the Department of Energy (DOE) to receive and possess source, special nuclear, and byproduct material at a geologic repository sited, constructed, or operated in accordance with the Nuclear Waste Policy Act of 1982.

Part 72 of 10 CFR establishes requirements, procedures, and criteria for the issuance of licenses to receive, transfer, and possess power reactor spent fuel and other radioactive materials associated with spent fuel storage in an independent spent fuel storage installation (ISFSI) and the terms and conditions under which the Nuclear Regulatory Commission (NRC) will issue such licenses. This includes licenses to the U.S. Department of Energy (DOE) for the provision of spent fuel storage capacity at facilities not owned by the Federal Government as regulated by the Nuclear Waste Policy Act of 1982 (NWPA). The regulations in this part also establish requirements, procedures, and criteria for the issuance of licenses to DOE to receive, transfer, package, and possess power reactor spent fuel and high-level radioactive waste storage in a monitored retrievable storage installation (MRS).

**Inspection Authorities:** Section 161(0) of the Atomic Energy Act authorizes the development of inspections programs to ensure that the requirements of the Act are met.

**Assistance:** DOE staff and contractors who have questions concerning the AEA may contract the Office of Environmental Guidance, Air, Water, and Radiation Division (EH-232) at (FTS) 896-2409 or (202) 586-2409, or the Designated Compliance Coordinator in the Office of Environmental Compliance (EH-22) at (FTS) 896-2113 or (202) 586-2113. Questions regarding the MRS or high-level radioactive waste repository may also be referred to the Regulatory Compliance Division, Office of Systems and Compliance (RW-33) at (FTS) 896-1447 or (202) 286-1447.

## Atomic Energy Act (AEA)

*The Atomic Energy Act, as amended, regulates the production, possession, and use of special, source, and byproduct nuclear material. The Nuclear Waste Policy Act, as amended, contains inspection requirements for the following facilities. None of these facilities are in operation yet, but either are in the construction phase, or the planning stage.*

## Facilities with Inspection Requirements

- Geologic Repositories (used for the disposal of high-level radioactive wastes)
- Monitored Retrievable Storage
- Interim Spent Fuel Storage Installation

## INSPECTION REQUIREMENTS UNDER AEA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Geologic repositories used for the disposal of high-level radioactive wastes.<br><br>Inspection Type:<br>Both self inspection and regulatory authority.<br><br>References:<br>10 CFR 60.43(b). | Provides license conditions. | As Nuclear Regulatory Commission (NRC) finds appropriate. | Elements of Inspection:<br>"License conditions shall include items in the following categories:<br>(1) Restrictions as to the physical and chemical form and radioisotopic content of radioactive waste.<br>(2) Restrictions as to size, shape, and materials and methods of construction of radioactive waste packaging.<br>(3) Restrictions as to the amount of waste permitted per unit volume of storage space considering the physical characteristics of both the waste and host rock.<br>(4) Requirements relating to test calibration, or inspection to assure that the forgoing restrictions are observed."<br><br>Solution:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER AEA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Geologic repositories used for the disposal of high-level radioactive wastes.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>10 CFR 60.75. | Allowing inspection by the Nuclear Regulatory Commission (NRC). | Upon request. | Elements of Inspection:<br>"DOE shall allow the Commission to inspect the premises of the geologic repository operations area and adjacent areas to which DOE has rights of access."<br><br>"DOE shall upon request by the Director, Office of Nuclear Material Safety and Safeguards, provide rent-free office space for the exclusive use of the Commission inspection personnel. The air-conditioning, light, electrical outlets and janitorial services shall be furnished by DOE. The office shall be convenient to and have full access to the facility and shall provide the inspector both visual and acoustic privacy."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified, however, "DOE shall make available to the Commission for inspection, upon reasonable notice, records kept by DOE pertaining to activities under this part."<br><br>Personnel:<br>NRC personnel. |

**INSPECTION REQUIREMENTS UNDER AEA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Geologic repository operations area.<br><br>Inspection Type:<br>Both self inspection, and regulatory authority.<br><br>References:<br>10 CFR 60.131(b). | Design to allow inspection. | Periodic inspection. | Elements of Inspection:<br>"The structures, systems, and components important to safety shall be designed to permit periodic inspection, testing, and maintenance, as necessary, to ensure their continued functioning and readiness."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER AEA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Storage of spent nuclear fuel and high-level radioactive waste.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>10 CFR 72.44(c). | Surveillance requirements included in license. | As needed to ensure that the necessary integrity of required systems and components is maintained. | Elements of Inspection:<br>"Each license issued under this part must include technical specifications. Technical specifications must include requirements in the following categories...<br>Surveillance requirements. Surveillance requirements include:<br>(1) Inspection and monitoring of spent fuel or high-level radioactive waste in storage;<br>(2) Inspection, test, and calibration activities to ensure that the necessary integrity of required systems and components is maintained."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER AEA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Storage of spent nuclear fuel and high-level radioactive waste.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>10 CFR 72.82. | Monitoring compliance with the AEA. | Upon reasonable notice. | Elements of Inspection:<br>"Each licensee under this part shall permit inspection by duly authorized representatives of the NRC of its records, premises, and activities and of spent fuel or high-level radioactive waste in its possession related to the specific license as may be necessary to effectuate the purposes of the Act, including AEA § 105. Each licensee under this part shall make available to the Commission for inspection, upon reasonable notice, records kept by the licensee pertaining to its receipt, possession, packaging, or transfer of spent fuel or high-level radioactive waste.<br><br>Each licensee under this part shall upon request by the Director, Office of Nuclear Material Safety and Safeguards or the appropriate NRC Regional Administrator provide rent-free office space for the exclusive use of the Commission inspection personnel. The heat, air conditioning, light, electrical outlets and janitorial services shall be furnished by each licensee. The office shall be convenient to and have full access to the installation and shall provide the inspector both visual and acoustic privacy."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>Duly authorized representatives of the NRC. |

**INSPECTION REQUIREMENTS UNDER AEA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Storage of spent nuclear fuel and high-level radioactive waste.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>10 CFR 72.160. | Verification of compliance with documented instructions, procedures, and drawings. | None specified. | Elements of Inspection:<br>"The licensee shall establish and execute a program for inspection of activities affecting quality by or for the organization performing the activity to verify conformance with the documented instructions, procedures, and drawings for accomplishing the activity. The inspection must be performed by individuals other than those who performed the activity being inspected. Examinations, measurements, or tests of material or products processed must be performed for each work operation where necessary to assure quality. If direct inspection of processed material or products cannot be carried out, indirect control by monitoring processing methods, equipment, and personnel must be provided. Both inspection and process monitoring must be provided when quality control is inadequate without both. If mandatory inspection hold points, which require witnessing or inspecting by the licensee's designated representative and beyond which work should not proceed without the consent of its designated representative, are required, the specific hold points must be indicated in appropriate documents."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER AEA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Storage of spent nuclear fuel and high-level radioactive waste. (Cont.) | | | Personnel:<br>The inspection must be performed by individuals other than those who performed the activity being inspected. |

## INSPECTION REQUIREMENTS UNDER AEA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Storage of spent nuclear fuel and high-level radioactive waste.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>10 CFR 72.168. | To indicate the status of inspections and tests performed upon individual items of the independent spent fuel storage installation (ISFSI) or monitored retrievable storage installation (MRS). | None specified. | Elements of Inspection:<br>"The licensee shall establish measures to indicate, by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed upon individual items of the ISFSI or MRS. These measures must provide for the identification of items which have satisfactorily passed required inspections and tests where necessary to preclude inadvertent bypassing of the inspections and tests."<br><br>Solutions:<br>None specified.<br><br>Follow-UP:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER AEA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Storage of spent nuclear fuel and high-level radioactive waste.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>10 CFR 72.174. | Maintaining records. | None specified. | Elements of Inspection:<br>"The licensee shall maintain sufficient records to furnish evidence of activities affecting quality. The records must include the following: design records, records of use and the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses. The records must include closely related data such as qualifications of personnel, procedures, and equipment. Inspection and test records must, at a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any noted deficiencies. Records must be identifiable and retrievable. Records pertaining to the design, fabrication, erection, testing, maintenance, and use of structures, systems, and components important to safety shall be maintained by or under the control of the licensee until the Commission terminates the license."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER AEA**

| **General Information** | Purpose | **Scheduling** Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Storage of spent nuclear fuel and high-level radioactive waste.<br><br>InspectionType:<br>Regulatory authority.<br><br>References:<br>10 CFR 72.212. | Records inspection. | Upon request. | Elements of Inspection:<br>"Make records and [spent fuel] casks available to the Commission for inspection."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

# PART VII

# CLEAN WATER ACT (CWA)

Clean Water Act
(CWA)

Purpose: The objective of the Federal Water Pollution Control Act as amended in 1977 and 1987 and renamed the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. This Act strives to make all waters capable of supporting fish and aquatic plants, as well as swimming and other recreational activities. These goals are to be achieved by constructing and upgrading waste treatment works, by establishing water quality standards, by restricting the discharge of pollutants through industrial and municipal point sources, and by controlling non-point sources of pollution. Section 311 of the CWA requires Spill Prevention, Control, and Countermeasure (SPCC) plans for facilities and vessels which store or transport large quantities of oil.

To control the discharge of conventional, nutrient, and toxic pollutants from point sources into navigable waters of the United States, the National Pollutant Discharge Elimination System (NPDES) was established. Except as provided for by Section 404 (Dredge and Fill Permits), the Administrator of the EPA or a delegated State may issue a permit for the discharge of any pollutant upon condition that such discharge will meet all applicable requirements under Section 301 (Effluent Limitations), Section 302 (Water Quality Related Effluent Limitations), Section 306 (National Standards of Performance), Section 307 (Toxic and Pretreatment Effluent Standards), Section 308 (Inspections, Monitoring, and Entry), and Section 403 (Ocean Discharge Criteria) of the Clean Water Act, or other conditions as deemed necessary by the Administrator.

Application to DOE: As stated in Section 313 of the Clean Water Act, "each department, agency or other instruments of the Federal Government shall be subject to, and comply with, all Federal, State and other requirements."

Exemptions: The President may exempt any effluent source of any department, agency, or instrument in the executive branch from compliance with any such requirement if he determines it to be in the paramount interest of the United States to do so, except that no exemption maybe granted from the requirements of Section 306 (National Standards of Performance) or Section 307 (Toxic and Pretreatment Effluent Standards) of this Act. Exemptions shall not exceed one year, but additional exemptions may be granted for additional one year periods.

Inspection Authorities: Section 308 of the Clean Water Act authorizes the Administrator or his authorized representative, upon presentation of his credentials, to the right of entry to, upon, or through any premises in which an effluent source is located, or to any place where applicable records maybe located. The inspection of monitoring equipment, and the sampling of effluent is also authorized.

Assistance: DOE staff and contractors who have questions concerning the CWA may contact the Office of Environmental Guidance, Air, Water and Radiation Division (EH-232) at (FTS) 896-2409 or (202) 586-2409, or the designated compliance coordinator in the Office of Environmental Compliance (EH-22) at (FTS) 896-2113, or (202) 586-2113.

*C WA regulations for inspections tend to be facility specific: There are however, inspection regulations as part of a permit application under the National Pollutant Discharge Elimination System (NPDES). Inspections as part of a regulated facility's Spill Prevention Control and Countermeasures Plan (SPCCP) are also included. C WA also has regulations which provide for inspections by regulatory authorities.*

## Facilities with Inspection Requirements

- Onshore Facilities
- Onshore Bulk Storage Tanks
- NPDES Permitted Facilities
- Ancillary Manufacturing Operations

## INSPECTION REQUIREMENTS UNDER CWA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Onshore facilities.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR § l12.7(e)(2)(iii).<br>Solutions were obtained from 112.7(d)(2).<br>Inspection Report was obtained from 112.7(e)(8). | To provide guidelines for inspections which are included in spill prevention control and countermeasures (SPCC) plans. | None specified, but prior to draining retained storm water is implied.<br><br>Maintained for a period. of 3 years. | Elements of Inspection:<br>"Drainage of rainwater from the diked area into a storm drain or an effluent discharge that empties into an open water course, lake or pond, and bypassing the in-plant treatment system may be acceptable if:<br>(A) The bypass valve is normally sealed closed,<br>(B) Inspection of the run-off rainwater ensures compliance with applicable water quality standards and will not cause a harmful discharge (See 40 CFR Part 110, Discharge of oil);<br>(C) The bypass valve is opened, and resealed following drainage under responsible supervision.<br>(D) Adequate records are kept of such events."<br><br>Solutions:<br>None were specified: however, the SPCC should have, "a written commitment of manpower, equipment, and materials required to expeditiously control and remove any harmful quantity of oil discharged."<br><br>Inspection Report:<br>"Inspections required by this part should be in accordance with written procedures developed for the facility by the owner or operator. These written procedures and a record of the inspections, signed by the appropriate supervisor or inspector, should be made part of the SPCC Plan and maintained for a period of 3 years."<br><br>Personnel:<br>None specified. |

## INSPECTION REQUIREMENTS UNDER CWA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Onshore bulk storage tanks.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR § 112.7(e)(2)(vi), (vii), and (ix). Solutions were obtained from 112.7(d)(2). Inspection Report was obtained from 112.7(e)(8). | To provide guidelines for inspections which are included in SPCC plans. | Periodic.<br><br>Frequently. | Elements of Inspection:<br>"Aboveground tanks should be subject to periodic integrity testing, taking into account tank design (floating roof, etc.) and using such techniques as hydrostatic testing, visual inspection or a system of non-destructive shell thickness testing. Tank supports and foundations should be included in these inspections. In addition, the outside of the tank should frequently be observed by operating personnel for signs of deterioration, leaks which might cause a spill, or accumulation of oil inside diked areas."<br><br>"To control leakage through defective internal heating coils, the following "..." should be considered and applied, as appropriate.<br>(A) The steam return or exhaust lines from internal heating coils which discharge into an open water course should be monitored for contamination, or passed through a settling tank, skimmer, or other separation or retention system."<br><br>"Plant effluents which are discharged into navigable waters should have disposal facilities observed frequently enough to detect possible system upsets that could cause an oil spill event."<br><br>Solutions:<br>None were specified, however, as part of the SPCC there should be, "a written commitment of manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged." |

**INSPECTION REQUIREMENTS UNDER CWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Onshore bulk storage tanks. (Cont.) | | Maintained for a period of 3 years. | Inspection Report:<br>"Comparison records should be kept where appropriate. Inspections required by this part should be in accordance with written procedures developed for the facility by the owner or operator. These written procedures and a record of the inspections, signed by the appropriate supervisor or inspector, should be made part of the SPCC Plan and maintained for a period of 3 years."<br><br>Personnel:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>NPDES-permitted facilities.<br><br>Inspection Type:<br>Self inspection.<br><br>Reference:<br>40 CFR § 125.72. | Providing additional information in support of an alternative effluent limitation standard under the National Pollutant Discharge Elimination System (NPDES). | Within 60 days following a section 316(a) thermal effluent variance application. | Elements of Inspection:<br>"Within 60 days after the application is filed, the discharger shall submit for the Director's approval a detailed plan of study which the discharger will undertake to support its section 316(a) (Thermal discharges) demonstration. The discharger shall specify the nature and extent of the following type of information to be included in the plan of study Biological, hydrographical and meteorological data; physical monitoring data; engineering or diffusion models; laboratory studies; representative important species; and other relevant information. In selecting representative important species, special consideration shall be given to species mentioned in applicable water quality standards. After the discharger submits its detailed plan of study, the Director shall either approve the plan or specify any necessary revisions to the plan. The discharger shall provide any additional information or studies which the Director subsequently determines necessary to support the demonstration, including such studies or inspections as may be necessary to select representative important species. The discharger may provide any additional information or studies which the discharger feels are appropriate to support the demonstration."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| NPDES-permitted facilities. (Cont.) | | | Personnel:<br>The Regional Administrator or State Director. |

**INSPECTION REQUIREMENTS UNDER CWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Ancillary manufacturing operations.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 125.104. | To implement BMPs for ancillary manufacturing operations including: "Materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas." | No specified schedule, but it must be in accordance with good engineering practices. | Elements of Inspection:<br>Visual inspection of ancillary activities to control the release of toxic or hazardous pollutants.<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER CWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>Facility inspection prior to operation.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 121.26.<br>Solutions was obtained from 40 CFR 121.27. | To determine if the manner in which a facility or activity will be operated or conducted will violate applicable water quality standards. | Prior to the initial operation. | Elements of Inspection:<br>"Where any facility or activity has received certification pursuant to § 121.24 (Certification) in connection with the issuance of a license or permit for construction, and where such facility or activity is not required to obtain an operating license or permit, the Regional Administrator or his representative, prior to the initial operation of such facility or activity, shall be afforded the opportunity to inspect such facility or activity for the purpose of determining if the manner in which such facility or activity will be operated or conducted will violate applicable water quality standards."<br><br>Solutions:<br>"If the Regional Administrator, after an inspection pursuant to § 121.26, determines that operation of the proposed facility or activity will violate applicable water quality standards, he shall so notify the applicant and the licensing or permitting agency, including his recommendations as to remedial measures necessary to bring the operation of the proposed facility into compliance with such standards."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The Regional Administrator or his/her representative. |

## INSPECTION REQUIREMENTS UNDER CWA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Activity:<br>NPDES compliance inspection.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR § 122.41(i). | To assure compliance with NPDES permit requirements. | None specified. | Elements of Inspection:<br>The permittee must allow the inspector to:<br>"(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;<br>(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;<br>(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and<br>(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>The Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator). |

## INSPECTION REQUIREMENTS UNDER CWA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulatory Activity:<br>State compliance inspections.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR §123.26 and 123.27. | To determine, independent of information supplied by regulated persons, compliance or noncompliance with applicable water program requirements. | Periodically in accordance with state procedures.<br><br>At least annually for all major dischargers and all Class I sludge management facilities (as defined in 40 CFR 501.2). | Elements of Inspection:<br>The inspections are conducted in a manner designed to:<br>"(1) Determine compliance or non-compliance with issued permit conditions and other program requirements;<br>(2) Verify the accuracy of information submitted by permitters and other regulated persons in reporting forms and other forms supplying monitoring data; and<br>(3) Verify the adequacy of sampling, monitoring, and other methods used by permitters and other regulated persons to develop that information."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>"The State Director and State officers engaged in compliance evaluation shall have authority to enter any site or premises subject to regulation or in which records relevant to program operation are kept in order to copy any records, inspect, monitor or otherwise investigate compliance with the State program including compliance with permit conditions and other program requirements. States whose law requires a search warrant before entry conform with this requirement." |

# PART VIII

# SAFE DRINKING WATER ACT (SDWA)

# Safe Drinking Water Act
# (SDWA)

Purpose: The Safe Drinking Water Act was enacted to protect the quality of the nation's public drinking water systems. It establishes national drinking water standards for public water supplies, identifies contaminants that may pose a threat to public health or welfare if present in drinking water, and requires for such contaminants either the establishment of maximum contaminant levels (MCLs) regulating their concentration in such water or the specification of treatment technologies that reduce the level of such contaminants to safe levels. The SDWA was also designed to protect aquifers used to provide drinking water, and to regulate the use of underground injection wells for the disposal of hazardous or toxic materials.

Classes of Wells: Under the Safe Drinking Water Act regulations, underground injection wells have been divided into five classes:

1. Class I - Waste injection wells, including:

   a. "Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water; and"

   b. "Other industrial and municipal disposal wells which inject fluids beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water."

2. Class II - Wells which inject fluids:

   a. "Which are brought to the surface in connection with natural gas storage operations or conventional oil or natural gas production and which may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;"

   b. "For enhanced recovery of oil or natural gas; and"

c. "For storage of hydrocarbons which are liquid at standard temperature and pressure."

3. Class 111 - Wells which inject for extraction of minerals including:

a. "Mining of sulfur by the Frasch process;"

b. "Solution mining of salts or potash; and"

c. "In-situp production of uranium or other metals. (This category includes only in-situ production from ore bodies which have not been conventionally mined. Solution mining of conventional mines such as stopes leaching is included in Class V.)"

4. Class IV - Wells used by:

a. "Generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into a formation which, within one-quarter (1/4) mile of the well, contains an underground source of drinking water;"

b. "Generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste above a formation which, within one-quarter (1/4) mile of the well, contains an underground source of drinking water; and"

c. "Generators of hazardous waste or owners or operators of hazardous waste management facilities to dispose of hazardous waste, which cannot be classified under paragraphs l(a), 4(a), or 4(b) above."

5. "Class V - Injection wells not included in Classes I, II, III, or IV."

Compliance by Federal Agencies: As mandated by Section 1445(b)(l) of the Safe Drinking Water Act, "Each Federal agency which has jurisdiction over any Federally owned or

maintained public water system or which engages in any activities which may result in the endangerment of drinking ‘water through underground injection, shall comply with all Federal, State and local requirements.”

Inspection Authorities: Section 1445(b)(l) of the SDWA authorizes the Administrator of EPA to enter any establishment, facility, or other property of any “supplier of water or other person subject to (A) a national primary drinking water regulation..., (B) an applicable underground injection control program,, or (C) any requirement to monitor an unregulated contaminant... to determine whether such supplier... has acted or is acting in compliance with this title, including for this purpose, inspection, at reasonable times, of records, files, papers, processes, controls, and. facilities, or in order to test any feature of a public water system, including its raw water source.”

Waiver: When requested by the Secretary of Defense, compliance by Federal agencies may be waived by the President to safeguard national security interests.

Assistance: DOE staff and contractors who have questions concerning the SDWA may contact the Office of Environmental Guidance, RCRA/CERCLA Division (EH-231) at (FTS) 896-6374 or (202) 586-6374 or the appropriate compliance coordinator in the Office of Environmental Compliance at (FTS) 896-2113 or (202) 586-2113. In addition, EPA maintains a SDWA Hotline that operates Monday - Friday, 8:30am - 4:30pm (EST) at (800) 426-4791 or (202) 382-5533.

## Safe Drinking Water Act (SDWA)

*The majority of SDWA inspection requirements are facility specific. SDWA also provides for inspections of watershed control programs (including disinfection treatment equipment) and inspections by regulatory authorities.*

## Facilities with Inspection Requirements

- Public Water Systems
- Underground Injection Wells

**INSPECTION REQUIREMENTS UNDER SDWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Public water system.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR § 141.71(b).<br>Inspection Report was obtained from 141.71(b) and 141.75(a)(4). | To assess the watershed control program and disinfection treatment process. | Annually. | Elements of Inspection:<br>The annual "on-site inspection must include:<br>(1) A review of the effectiveness of the watershed control program,<br>(2) A review of the physical condition of the source intake and how well it is protected;<br>(3) A review of the system's equipment maintenance program to ensure there is low probability for failure of the disinfection process;<br>(4) An inspection of the disinfection equipment for physical deterioration;<br>(5) A review of operating procedures;<br>(6) **A** review of data records to ensure that all required tests are being conducted and recorded and disinfection is effectively practiced: and<br>(7) Identification of any improvements which are needed in the equipment, system maintenance and operation, or data collection."<br><br>"The on-site inspection must indicate to the State's satisfaction that the watershed control program and disinfection treatment process are adequately designed and maintained."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>"A report of the on-site inspection summarizing all findings must be prepared" annually. |
| | | Annually. | |

**INSPECTION REQUIREMENTS UNDER SDWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Public water system. (Cont.) | | No later than 10 days after the end of each Federal fiscal year (September 30). | "No later than ten days after the end of each Federal fiscal year (September 30), each system must provide to the State a report on the on-site inspection conducted during that year pursuant to § 141.71(b)(3), unless the on-site inspection was conducted by the State. If the inspection was conducted by the State, the State must provide a copy of its report to the public water system."<br><br>Personnel:<br>"Either the State or a party approved by the State must conduct the on-site inspection. The inspection must be conducted by competent individuals such as sanitary and civil engineers, sanitarians, or technicians who have experience and knowledge about the operation and maintenance of a public water system, and who have a sound understanding of public health principles and waterborne diseases." |

**INSPECTION REQUIREMENTS UNDER SDWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Public water works.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 142.34(a), (b) and (c). | Enforcement of National Primary Drinking Water (NPDW) regulations. | At any time. | Elements of Inspection:<br>"Any supplier of water or other person subject to a national primary drinking water regulation shall, at any time, allow the Administrator, or a designated representative of the Administrator, upon presenting appropriate credentials and a written notice of inspection, to enter any establishment, facility or other property of such supplier or other person to determine whether such supplier or other person has acted or is acting in compliance with the requirements of the Act or Subchapter D of this chapter (Water Programs). Such inspection may include inspection, at reasonable times, of records, files, papers, processes, controls and facilities, or testing of any feature of a public water system, including its raw water source."<br><br>"Prior to entry into any establishment, facility or other property within a state which has primary enforcement responsibility, the Administrator shall notify, in writing, the state agency charged with responsibility for safe drinking water of his intention to make such entry and shall include in his notification a statement of reasons for such entry. The Administrator shall, upon a showing by the state agency that such an entry will be detrimental to the administration of the state's program of primary enforcement responsibility, take such showing into consideration in determining whether to make such entry. The Administrator shall in any event offer the state agency the opportunity of having a representative accompany the Administrator or his representative on such entry. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Public water works. (Cont.) | | | "No state agency which receives notice" under the preceding paragraph "may use the information to inform the person whose property is proposed to be entered of the proposed entry; if a state so uses such information, notice to the agency under" the preceding paragraph 'is not required for subsequent inspections of public water systems until such time as the Administrator determines that the agency has provided him satisfactory assurances that it will no longer so use information contained in a notice received under" the preceding paragraph.<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>"The Administrator, or a designated representative of the Administrator, upon presenting appropriate credentials and a written notice of inspection." |

**INSPECTION REQUIREMENTS UNDER SDWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Underground injection wells.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 144.51. | Underground Injection Control Permit compliance. | At any time. | Elements of Inspection:<br>"The Underground Injection Control (UIC) permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:<br>(l) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;<br>(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;<br>(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and<br>(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>"The Director, or an authorized representative, upon the presentation of credentials and other documents as maybe required by law." |

**INSPECTION REQUIREMENTS UNDER SDWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Underground injection wells.<br><br>Inspection Types:<br>Regulatory authority.<br><br>preferences:<br>40 CFR 144.51(m). | Determining compliance with permit conditions. | Prior to commencing injection. | Elements of Inspection:<br>"Except for all new wells authorized by an area permit under 40 CFR § 144.33(c) (Area permits), a new injection well may not commence injection until construction is complete, and<br>(1) The permittee has submitted notice of completion of construction to the Director; and<br>(2) (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the permit; or<br>(ii) The permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in (1) above, in which case prior inspection or review is waived and the permittee may commence injection. The Director shall include in his notice a reasonable time period in which she/he shall inspect the well."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER SDWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Class I hazardous waste injection wells.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR 146.66(a)(3) and 146.68(d)(4)<br>Inspection Report information was obtained from 40 CFR 146.69 (Reporting Requirements). | Mechanical integrity testing. | During the drilling and construction.<br><br>At least once every 5 years.<br><br>Within 30 days. | Elements of Inspection:<br>"Casing inspection logs shall be run during the drilling and construction of a new Class I hazardous waste injection well if required by the Director."<br><br>"Casing inspection logs shall be run at least once every 5 years unless the Director waives this requirement due to well construction or other factors which limit the test's reliability."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>"Reporting requirements shall include reporting, within 30 days or with the next quarterly report, whichever comes later, the results of periodic tests of mechanical integrity."<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER SDWA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Class 11 enhanced recovery wells.<br><br>Inspection Type:<br>Self Inspection.<br><br>References:<br>40 CFR 146.8(b). | To evaluate the absence of significant leaks. | Prescribed by Director. | Elements of Inspection:<br>"An injection well has mechanical integrity if "they are": Existing wells constructed without a long string casing, but with surface casing which terminates at the base of fresh water provided that local geological and hydrological features allow such construction and provided further that the annular space shall be visually inspected. For these wells, the Director shall prescribe a monitoring program which will verify the absence of significant fluid movement from the injection zone into an underground source of drinking water."<br><br>Solutions:<br>None specified.<br><br>Inspection Report:<br>None specified.<br><br>Personnel:<br>None specified. |

# PART IX

# TOXIC SUBSTANCES CONTROL ACT (TSCA)

# Toxic Substances Control Act
# (TSCA)

**Purpose:** The Toxic Substances Control Act was enacted in response to the acknowledgement by Congress that human populations were incurring unacceptable and unnecessary levels of exposure to chemical substances and mixtures. Although regulations already existed to control these substances, the regulations were oriented toward a specific medium (i.e., air, water, or solid waste) and were not sufficient to reduce, to below a reasonable level, the overall risk of injury to human health as a result of chemical manufacture, processing, distribution in commerce, use, or disposal. TSCA is a gap-filling statute that gives EPA the authority to control substances to the extent they are not covered by other laws. It gives EPA the authority to prohibit or limit the manufacture, importation, processing, distribution, use, or disposal of chemicals which pose an unreasonable risk (e.g. PCBs and asbestos). TSCA also mandated the development of data on the health effects of such chemicals and mixtures; in addition, it specifies that TSCA regulations must be designed in a manner that does not unduly impede technological innovation or commerce.

**Application to DOE:** Within the context of TSCA, the term "person" is defined to include "any department, agency, or instrumentality of the Federal Government." Thus, the requirements of TSCA would apply to any DOE facility that engages in the activities that it regulates. Typically TSCA applies to the manufacture, processing, or distribution of chemicals or substances or mixtures in commerce. This does not necessarily mean that its applicability is limited to "commercial" (i.e., for profit) manufacture of chemical substances. Chemicals manufactured at one DOE facility and transported to another for use could be construed to be "in commerce". In addition, DOE support contractors would be considered to constitute commercial entities, and thus would be subject to the requirements of TSCA.

**Inspection Authorities:** Section 8 of TSCA states that a person who manufactures or processes "a chemical substance in small quantities (as defined by the Administrator by rule) solely for the purposes of scientific experimentation or analysis or chemical research... shall maintain records and submit to the administrator reports but only to the extent that the Administrator determines the maintenance of such records or submission of reports , or both, is necessary for the effective enforcement of the Act." Section 8 further stipulates that

any person who manufactures or processes a chemical substance or mixture shall maintain records of significant adverse reactions to health or the environment alleged to have been caused by the chemical or mixture. Such records shall include reports of occupational disease or injury, and reports or complaints of injury to the environment. The Administrator of EPA shall have the authority to inspect such records. TSCA gives EPA authority to promulgate regulations, including regulations requiring self-inspections pertaining to regulated chemicals. For example, under authority of TSCA Section 6(e), EPA requires owners of PCB transformers to perform inspections of the transformers and record the inspection results.

Waiver: Section 22 of TSCA allows the Administrator of EPA to "waive compliance with any provision of this Act upon a request and determination by the President that the requested waiver is necessary in the interest of national defense."

Assistance: DOE staff and contractors who have questions concerning TSCA may contact the Office of Environmental Guidance, RCRA/CERCLA Division (EH-231) at (FTS) 896-6374 or (202) 586-6374 or the appropriate compliance coordinator at (FTS) 896-2113 or (202) 586-2113. In addition, EPA maintains a TSCA Hotline that operates Monday - Friday, 8:30am - 5:00 pm (EST) at (202) 554-1404.

*TSCA inspection requirements are facility or equipment specific. TSCA also provides for inspections by regulatory authorities.*

## Facilities/Equipment with Inspection Requirements

- Retrofilled PCB Transformers
- Vehicles used for the transport of containerized asbestos waste

**INSPECTION REQUIREMENTS UNDER TSCA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Retrofilled PCB transformers.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR §761.30 (a)(l) (ix), (x), and (xiii). | To provide for the inspection of non-totally enclosed PCB activities which are authorized by section 6(e)(2)(B) of TSCA. | At least once every 3 months. These inspections may take place any time during the 3-month periods: January-March, April-June, July-September, and October-December as long as there is a minimum of 30 days between inspections.<br><br>At least once every 12 months. These inspections may take place any time during the calendar year as long as there is a minimum of 180 days between inspections.<br><br>At least once every week. | Elements of Inspection:<br>"A visual inspection of each PCB Transformer (as defined in the definition of "PCB Transformer" under § 761.3) in use or stored for reuse shall be performed At least once every 3 months. The visual inspection must include investigation for any leak of dielectric fluid on or around the transformer. The extent of the visual inspections will depend on the physical constraints of each transformer installation and should not require an electrical shutdown of the transformer being inspected."<br><br>"A reduced visual inspection frequency of at least once every 12 months applies to PCB transformers that utilize either of the following risk reduction measures:<br>(1) A PCB Transformer which has impervious, undrained, secondary containment capacity of at least 100% of the dielectric fluid volume of all transformers so contained, or<br>(2) **A** PCB Transformer which has been tested and found to contain less than 60,000 ppm PCBs (after 3 months of in-service use if the transformer has been serviced for purposes of reducing the PCB concentration."<br><br>Solutions:<br>"If a PCB Transformer is found to have a leak which results in any quantity of PCBs running off or about to run off the external surface of the transformer, then the transformer must be repaired or replaced to eliminate the source of the leak. In all cases any leaking material must be cleaned up and properly disposed of according to disposal requirements of § 761.60 (Disposal requirements). Cleanup of the released PCBs must be initiated |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Retrofilled PCB transformers. (Cont.) | | | as soon as possible, but in no case later than 48 hours of its discovery. Until appropriate action is completed, any active leak of PCBs must be contained to prevent exposure of humans or the environment and inspected daily to verify containment of the leak. Trenches, dikes, buckets, and pans are examples of proper containment measures."<br><br>Inspection Reports:<br>"Records of inspection and maintenance history shall be maintained at least 3 years after disposing of the transformer and shall be made available for inspection, upon request by EPA Such records shall contain the following information for each PCB Transformer:<br>(1) Its location.<br>(2) The date of each visual inspection and the date that the leak was discovered, if different from the inspection date.<br>(3) The person performing the inspection.<br>(4) The location of any leaks(s).<br>(5) An estimate of the amount of dielectric fluid released from any leak.<br>(6) The date of any cleanup, containment, repair, or replacement.<br>(7) A description of any cleanup, containment, or repair performed.<br>(8) The results of any containment and daily inspection require d for uncorrected active leaks."<br><br>Personnel:<br>The owner or operator. |
| | | Maintained at least 3 years. | |

**INSPECTION REQUIREMENTS UNDER TSCA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Vehicles used for the transport of containerized asbestos waste.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR Part 763, Subpart E, Appendix D. | Although there are no regulatory specifications regarding the transport vehicle, EPA issued recommendations for vehicles used for transport of containerized asbestos waste. | Whenever transporting asbestos waste. | Elements of Inspection:<br>"Vacuum trucks used to transport waste slurry must be inspected to ensure that water is not leaking from the truck."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Regulated Unit:<br>Containers filled with asbestos waste.<br><br>Inspection Type:<br>Self inspection.<br><br>Reference:<br>40 CFR Part 763, Subpart E, Appendix D. | To verify that asbestos waste is properly contained in leak-tight containers and labeled appropriately. | Before a landfill operator accepts asbestos waste. | Elements of Inspection:<br>"The landfill operator should inspect the loads to verify that asbestos waste is properly contained in leak-tight containers and labeled appropriately."<br><br>Solutions:<br>"The appropriate EPA Regional Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAPs) Contact should be notified if the landfill operator believes that the asbestos waste is in a condition that may cause significant fiber release during disposal."<br><br>"In situations when the wastes are not properly containerized, the landfill operator should thoroughly soak the asbestos with a water spray prior to unloading, rinse out the truck, and immediately cover the wastes with non-asbestos material prior to compacting the waste in the landfill."<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>Landfill operator. |

**INSPECTION REQUIREMENTS UNDER TSCA**

| **General Information** | Purpose | **Scheduling Requirements** | **Required Procedures** |
|---|---|---|---|
| Regulatory Activity:<br>Enforcement inspections at asbestos abatement projects.<br><br>Inspection Type:<br>Regulatory authority.<br><br>Reference:<br>40 CFR § 763.125, 763.126; TSCA § 11(a) and (b), and TSCA § 15. | For the purposes of administering TSCA, to ensure compliance with the asbestos abatement projects regulations and to ensure compliance with EPA's prohibition of the manufacture, importation, or processing, and distribution in commerce of certain asbestos containing products. | As requested by a duly designated representative of EPA | Elements of Inspections:<br>"EPA will conduct inspections under §11 of TSCA (15 U.S.C. 2610) to ensure compliance with 40 CFR Part 763 (Asbestos regulations)."<br><br>"An inspection may only be made upon the presentation of appropriate credentials and of a written notice to the owner, operator, or agent in charge of the premises or conveyance to be inspected. A separate notice must be given for each such inspection, but a notice shall not be required for each entry made during the period covered by the inspection."<br><br>"Except as provided below, an inspection conducted under TSCA §1 l(a) shall extend to all things within the premises or conveyance inspected (including records, tiles, papers, processes, controls, and facilities) bearing on whether the requirements of this Act applicable to the chemical substances or mixtures within such premises or conveyance have been complied with."<br><br>"No inspection under TSCA §11(a) shall extend to:<br>(A) Financial data,<br>(B) Sales data (other than shipment data),<br>(C) Pricing data,<br>(D) Personnel data, or<br>(E) Research data (other than data required by this Actor under a rule promulgated thereunder), unless the nature and extent of such data are described with reasonable specificity in the written notice required by TSCA § 1l(a) for such inspection." |

**INSPECTION REQUIREMENTS UNDER TSCA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Enforcement inspections at asbestos abatement projects. (Cont.) | | | Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>The Administrator, and any duly designated representative of the Administrator may inspect. |

## INSPECTION REQUIREMENTS UNDER TSCA

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping:<br>Records of allegations.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR Part 717.l(b), TSCA § 8(c). | To implement § 8(c) of TSCA by recording significant adverse reactions to health or the environment alleged to have been caused by any chemical substance. | Upon request of any designated representative of the EPA Administrator. | Elements of Inspection;<br>"Manufacturers, processors, and distributors of chemical substances and mixtures must "permit inspection and submit copies of such records" [records of allegations], upon request of any designated representative of the Administrator.<br>The necessary records include consumer allegations of personal injury or harm to health, reports of occupational disease or injury, and reports or complaints of injury to the environment submitted to the manufacturer, processor, or distributor in commerce from any source."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>Any duly authorized representative of the EPA Administrator. |

**INSPECTION REQUIREMENTS UNDER TSCA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Reecordkeeping:<br>Logs of the disposition of PCBs and PCB items.<br><br>Inspection Type:<br>Regulatory authority.<br><br>References:<br>40 CFR 761.180(a). | Maintenance of all annual records and the written annual document log of the disposition of PCBs and PCB Items. | Upon request of an authorized representative of EPA. | Elements of Inspections:<br>"The annual records and the annual document log shall be available for inspection at the facility where they are maintained by authorized representatives of EPA during normal business hours, and each owner or operator of a facility subject to these requirements shall know the location of these records."<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>Authorized representatives of EPA. |

**INSPECTION REQUIREMENTS UNDER TSCA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping:<br>Log of the disposition of PCBs and PCB items.<br><br>Inspection Type:<br>Self inspection.<br><br>References:<br>40 CFR § 761.180(b). | Maintenance of a written annual document log of the disposition of PCBs and PCB items. | Upon request by an authorized representative of EPA. | Elements of Inspection:<br>The annual records and written annual document log shall be available at the facility for inspection by authorized representatives of the EPA.<br><br>Solutions:<br>None specified.<br><br>Inspection Reports:<br>None specified.<br><br>Personnel:<br>None specified. |

**INSPECTION REQUIREMENTS UNDER TSCA**

| General Information | Purpose | Scheduling Requirements | Required Procedures |
|---|---|---|---|
| Inspection of Recordkeeping: Dibenzo-para-dioxins/dibenzofurans tests<br><br>Inspection Type: Regulatory authority.<br><br>References: 40 CFR 766.10. | Compliance with TSCA protocols. | Upon request by EPA or its authorized representative. | Elements of inspections: "Testing required under Subpart B (Specific Chemical Testing/Reporting Requirements) of this part must be performed using the protocols submitted to and reviewed by the EPA expert panel established under § 766.28. All new data, documentation, records, protocols, specimens, and reports generated as a result of testing under Subpart B of this part must be fully developed and retained in accordance with Part 792 of this chapter. These items must be made available during an inspection or submitted to EPA upon request by EPA or its authorized representative."<br><br>Solutions: None specified.<br><br>Inspection Reports: None specified.<br><br>Personnel: EPA or its authorized representative. |

# PART X

# FEDERAL INSECTICIDE FUNGICIDE AND RODENTICIDE ACT (FIFRA)

# The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

**Purpose** The Federal Insecticide, Fungicide and Rodenticide Act, as amended, provides for the Federal control of pesticide distribution, sale, and use. It requires the registration (with minor exceptions) of all new pesticides. It also provides for the suspension or cancellation of pesticide products which present an "imminent hazard" to human health or the environment.

**Inspection Authority:** FIFRA provides for the inspection of establishments which produce, distribute, or sell pesticides. It does not provide for the inspection of pesticide users by regulatory authorities. However, the FIFRA regulations do include recommended self-inspection procedures for any person storing pesticides [40 CFR 165.10].

**Exemption:** Section 18 of FIFRA provides that "The Administrator may, at his discretion, exempt any Federal or State agency from any provision of this act, if he determines that emergency conditions exist which require such exemptions".

**Assistance:** DOE staff and contractors who have questions concerning FIFRA may contact the Office of Environmental Guidance, RCRA/CERCLA Division (EH-231) at (FTS) 896-6374 or (202) 586-6374 or the designated compliance coordinator in the Office of Environmental Compliance (EH-22) at (FTS) 896-2113 or (202) 586-2113. In addition, the Office of Pesticides Programs may be contacted Monday - Friday, 8:00 a.m. - 4:00 p.m. (EST) at (703) 557-2805.

## Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

*FIFRA only contains one inspection requirement which is applicable to DOE facilities,*

## Facilities with Inspection Requirements

- ❑ Pesticide Container Storage Areas

# APPENDIX A

# FEDERALLY SPONSORED HOTLINES

## Federally Sponsored Hotlines

| | |
|---|---|
| **Emergency Planning and Community Right-To-Know (EPCRA) Information Hotline** | Provides communities and individuals with help in preparing for accidental releases of toxic chemicals. This hotline, which complements the RCRA/Superfund Hotline, is maintained as an information resource rather than an emergency number. It operates Monday through Friday from 8:30 a.m. -7:30 p.m. (EST), and can be contacted at (800) 535-0202. |
| **National Response Center (NRC) Hotline** | Operated by the U.S. Coast Guard, this hotline is used to report spills of oil and other hazardous materials. The hotline is available 24 hours a day, every day of the year at (800) 424-8802 or, in the Washington, D.C. dialing area, at (202) 426-2675. |
| **Pollution Prevention Information Clearinghouse** | Provides information and answers to questions about reducing or eliminating discharges and/or emissions to the environment through source reduction and environmentally sound recycling. It can be contacted at (800) 424-9346 or, in the Washington, D.C. dialing area, at (202) 382-3000. |
| **RCRA/CERCLA** (Superfund) **Hotline** | Responds to questions from the public and regulated community on the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund), and also responds to requests for RCRA and Superfund documents. It operates Monday through Friday from 9:00 a.m. - 6:00 p.m. (EST), and can be contacted at (800) 424-9346 or, in the Washington, D.C. dialing area, at (703) 412-9810. |

| | |
|---|---|
| **Safe Drinking Water Hotline** | Provides information and publications to the public and the regulated community to assist in understanding EPA's drinking water regulations and programs. It operates Monday through Friday, 8:30 a.m. - 4:30 p.m. (EST), and can be contacted at (800) 426-4791 or, in the Washington, D.C. dialing area, at (202) 382-5533. |
| **Toxic Substances Control Act (TSCA) Assistance Information Services** | Provides both general and technical information and publications about toxic substances, including asbestos. A variety of other services also are offered to help businesses comply with TSCA laws, including regulatory advice and aid, publications, and audiovisual materials. It operates Monday through Friday from 8:30 a.m. -5:00 p.m. (EST), and can be contacted at (800) 835-6700 or, in the Washington, D.C. dialing area, at (202) 554-1404. |

# APPENDIX B

# GLOSSARY

**The Resource Conservation and Recovery Act**
**(RCRA)**

**"Administrator"** means the Administrator of the Environmental Protection Agency, or his designee.

**"Ancillary equipment"** means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.

**"Authorized representative"** means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), such as the plant manager, superintendent, or person of equivalent responsibility.

**"Boiler"** means an enclosed device using controlled flame combustion and having the following characteristics:

(1) (i) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(ii) The unit's combustion chamber and primary energy recovery sections(s) must be of integral design. [To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheater) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units]; and

(iii) While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

**"Boiler"** (Cont.)

(iv) The unit must export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. [In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps)]; or

(2) The unit is one which the Regional Administrator has determined, on a case-by-case basis, after considering the standards in 40 CFR 260.32.

**"Certification"** means a statement of professional opinion based upon knowledge and belief.

**"Component"** means either the tank or ancillary equipment of a tank system.

**"Container"** means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

**"Dike"** means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

**"Discharge"** or **"hazardous waste discharge"** means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

**"Disposal facility"** means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure.

**"EPA identification number"** means the number assigned by EPA to each generator, transporter, and treatment, storage, or disposal facility.

**"Existing portion"** means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

**"Existing tank system or existing component"** means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced on or prior to July 14, 1986. Installation will be considered to have commenced if the owner or operator has obtained all Federal, State, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:

(1) A continuous on-site physical construction or installation program has begun, or

(2) The owner or operator has entered into contractual obligations -- which cannot be canceled or modified without substantial loss -- for physical construction of the site or installation of the tank system to be completed within a reasonable time.

**"Facility"** means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

**"Freeboard"** means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

**"Generator"** means any person, by site, whose act or process produces hazardous waste identified or listed in 40 CFR 261 or whose act first causes a hazardous waste to become subject to regulation.

**"Hazardous waste"** means a hazardous waste as defined in 40 CFR 261.3.

**"Hazardous waste constituent"** means a constituent that caused the Administrator to list the hazardous waste in 40 CFR 261, Subpart D, or a constituent listed in Table 1 of 40 CFR 261.24.

**"Hazardous waste management unit"** is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a

**"Hazardous waste management unit"** (Cont.) landfill cell, an incinerator, a tank and its associated piping and underlying containment system, and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

**"In operation"** refers to a facility which is treating, storing, or disposing of hazardous waste.

**"Incinerator"** means any enclosed device that:

(1) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or

(2) Meets the definition of infrared incinerator or plasma arc incinerator.

**"Industrial furnace"** means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

(1) Cement kilns;
(2) Lime kilns;
(3) Aggregate kilns;
(4) Phosphate kilns;
(5) Coke ovens;
(6) Blast furnaces;
(7) Smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces);
(8) Titanium dioxide chloride process oxidation reactors;
(9) Methane reforming furnaces;
(10) Pulping liquor recovery furnaces;
(11) Combustion devices used in the recovery of sulfur values from spent sulfuric acid;
(12) Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3%, the acid product is used in a manufacturing

**"Industrial furnace"** (Cent.)process,and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20% as-generated; and

(13) Such other devices as the Administrator may, after notice and comment, add to this list on the basis of one or more of the following factors:
- (i) The design and use of the device primarily to accomplish recovery of material products;
- (ii) The use of the device to burn or reduce raw materials to make a material product;
- (iii) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;
- (iv) The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;
- (v) The use of the device in common industrial practice to produce a material product; and
- (vi) Other factors, as appropriate.

**"Installation inspector"** means a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

**"Landfill"** means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, or a cave.

**"Leachate"** means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.

**"Liner"** means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

**"Management or hazardous waste management"** means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

**"Manifest"** means the shipping document EPA form 8700-22 and, if necessary, EPA form 8700-22A originated and signed by the generator in accordance with the instructions included in the Appendix to 40 CFR 262.

**"Miscellaneous unit"** means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR Part 146, or unit eligible for a research, development, and demonstration permit under 40 CFR 270.65.

**"New tank system"** or new tank component means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after July 14, 1986; except, however, for purposes of 40 CFR 264.193(g)(2) and 40 CFR 265.193(g)(2), a new tank system is one for which construction commences after July 14, 1986. (See also "existing tank system.")

**"On-site"** means the same or geographically contiguous property which maybe divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, is also considered on-site property.

**"Open burning"** means the combustion of any material without the following characteristics:

(1) Control of combustion air to maintain adequate temperature for efficient combustion,

(2) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and

(3) Control of emission of the gaseous combustion products.

**"Operator''** means the person responsible for the overall operation of a facility. Owner means the person who owns a facility or part of a facility.

**"Person''** means an individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

**"Personnel or facility personnel"** means all persons who work at, or oversee the operations of, a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of 40 CFR 264 or 265.

**"Pile"** means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

**"Run-off'** means any rainwater, leachate, or other liquid that drains overland from any part of a facility.

**"Run-on"** means any rainwater, leachate, or other liquid that drains overland onto any part of a facility.

**"Small Quantity Generator"** means a generator who generates less than 1000 kg of hazardous waste in a calendar month.

**"Solid waste"** means a solid waste as defined in 40 CFR 261.2.

**"Sump"** means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serves to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities.

**"Surface impoundment or impoundment"** means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

**"Tank"** means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

**"Tank system"** means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

**"Thermal treatment"** means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning".)

**"Transport vehicle"** means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

**"Treatment"** means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; amenable for recovery; amenable for storage or reduced in volume.

**"Treatment zone"** means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

**"Underground tank"** means a device meeting the definition of "tank" in 40 CFR 260.10 whose entire surface area is totally below the surface of and covered by the ground.

**"Unfit-for-use tank system"** means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

**"Water (bulk shipment)"** means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

**"Well''** means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

Source: 40 CFR 260.10

## The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

**"CERCLA"** is the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986.

**"Community relations"** means EPA's program to inform and encourage public participation in the Superfund process and to respond to community concerns.

**"Public"** includes citizens directly affected by the site, other interested citizens or parties, organized groups, elected officials, and potentially responsible parties.

**"Discharge"** as defined by Section 31l(a)(2) of the Clean Water Act (CWA), includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under Section 402 of the CWA, discharges resulting from circumstances identified and reviewed and made a part of the public record with respect to a permit issued or modified under Section 402 of the CWA and subject to a condition in such permit, or continuous or anticipated intermittent discharges from a point source identified in a permit or permit application under Section 402 of the CWA that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of the National Contingency Plan (NCP), discharge also means threat of discharge.

**"Environment"** as defined by Section 101(8) of CERCLA means the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson Fishery Conservation and Management Act; and any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.

**"Facility"** as defined by Section 101(9) of CERCLA means any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or any site or area, where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.

**The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (Cont.)**

**"Feasibility Study (FS)"** means a study undertaken by the lead agency to develop and evaluate options for remedial action. The FS emphasizes data analysis and is generally performed concurrently and in an interactive fashion with the Remedial Investigation (RI), using data gathered during the RI. The RI data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to a report that describes the results of the study.

**"Fund or Trust Fund"** means the Hazardous Substance Superfund established by Section 9507 of the Internal Revenue Code of 1986.

**"Ground water"** as defined by Section 101(12) of CERCLA means water in a saturated zone or stratum beneath the surface of land or water.

**"Hazard Ranking System (HRS)"** means the method used by EPA to evaluate the relative potential of hazardous substance releases to cause health or safety problems, or ecological or environmental damage.

**"Hazardous Substance (HS)"** as defined by Section 101(14) of CERCLA means any substance designated pursuant to Section 31l(b)(2)(A) of the Clean Water Act; any element, compound, mixture, solution, or substance designated pursuant to Section 102 of CERCLA; any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste

**"Lead agency"** means the agency that provides the On Scene Coordinator/Remedial (OSC/RPM) to plan and implement response action under the National Contingency Plan (NCP). The Environmental Protection Agency (EPA), the United State Coast Guard (USCG), another Federal agency, or a State (or political subdivision of a State) operating pursuant to a contract or cooperative agreement executed pursuant to Section 104(d)(l) of CERCLA or designated pursuant to a Superfund Memorandum of Agreement (SMOA) entered into pursuant to Subpart F of the NCP or other agreements, may be the lead agency for a response action. In the case of a release of a hazardous substance, pollutant, or contaminant, where the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of Department of Defense (DOD) or Department of Energy (DOE), then DOD

**"Lead agency"** (Cont.) or DOE will be the lead agency. Where the release is on, or the sole source of the release is from, any facility or vessel under the jurisdiction, custody, or control of a Federal agency other than EPA, the USCG, DOD, or DOE, then that agency will be the lead agency for remedial actions and removal actions other than emergencies. The Federal agency maintains its lead agency responsibilities whether the remedy is selected by the Federal agency for non-NPL sites or by EPA and the Federal agency or by EPA alone under CERCLA Section 120. The lead agency will consult with the support agency, if one exists, throughout the response process.

**"National Priorities List (NPL)"** means the list, compiled by EPA pursuant to CERCLA Section 105, of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response.

**"On-Scene Coordinator (OSC)"** means the Federal official predesignated by Environmental Protection Agency (EPA) or the United States Coast Guard (USCG) to coordinate and direct Federal responses under Subpart D, or the official designated by the lead agency to coordinate and direct removal actions under Subpart E of the National Contingency Plan (NCP).

**"On-site"** means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.

**"Person"** as defined by Section 101(21) of CERCLA means an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States government, State, municipality, commission, political subdivision of a State, or any interstate body.

**"Pollutant or contaminant"** as defined by Section 101(33) of CERCLA shall include, but not be limited to, any element, substance, compound, or mixture, including disease-causing agents, which, after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation,

**"Pollutant or contaminant"** (Cont.) physiological malfunctions (including malfunctions in reproduction) or physical deformations in such organisms or their offspring. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance under Section 101(14) (A) through (F) of CERCLA nor does it include natural gas, liquified natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas). For purposes of the NCP, the term pollutant or contaminant means any pollutant or contaminant that may present an imminent and substantial danger to public health or welfare.

**"Preliminary Assessment (PA)"** means review of existing information and an off-site reconnaissance, if appropriate, to determine if a release may require additional investigation or action. A PA may include an on-site reconnaissance, if appropriate.

**"Quality Assurance Project Plan (QAPP)"** is a written document, associated with all remedial site sampling activities, which presents in specific terms the organization (where applicable), objectives, functional activities, and specific quality assurance (QA) and quality control (QC) activities designed to achieve the data quality objectives of a specific project(s) or continuing operation(s). The QAPP is prepared for each specific project or continuing operation (or group of similar projects or continuing operations). The QAPP will be prepared by the responsible program office, regional office, laboratory, contractor, recipient of an assistance agreement, or other organization. For an enforcement action, potentially responsible parties may prepare a QAPP subject to lead agency approval.

**"Release"** as defined by Section 101(22) of CERCLA, means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous substance or pollutant or contaminant (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes: any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons; emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine; release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, if

**"Release"** (Cont.) such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under Section 170 of such Act, or, for the purposes of Section 104 of CERCLA or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under Section 102(a)(l) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978; and the normal application of fertilizer. For purposes of the NCP, release also means threat of release.

**"Remedial Design (RD)"** means the technical analysis and procedures which follow the selection of remedy for a site and result in a detailed set of plans and specifications for implementation of the remedial action.

**"Remedial Investigation (RI)"** is a process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the Feasibility Study. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

**"Remedy or Remedial Action (RA)"** means those actions consistent with permanent remedy taken instead of, or in addition to, removal action in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage; confinement; perimeter protection using dikes, trenches, or ditches; clay cover, neutralization; cleanup of released hazardous substances and associated contaminated materials; recycling or reuse; diversion; destruction; segregation of reactive wastes; dredging or excavations; repair or replacement of leaking containers; collection of leachate and runoff on-site treatment or incineration; provision of alternative water supplies; any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment; and, where appropriate, post-removal site control activities. The term includes the costs of permanent relocation of residents

**"Remedy or Remedial Action (RA)"** (Cont.) and businesses and community facilities (including the cost of providing "alternative land of equivalent value" to an Indian tribe pursuant to CERCLA Section 126(b)) where EPA determines that, alone or in combination with other measures, such relocation is more cost-effective than, and environmentally preferable to, the transportation, storage, treatment, destruction, or secure disposition off-site of such hazardous substances, or may otherwise be necessary to protect the public health or welfare; the term includes off-site transport and off-site storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials. For the purpose of the NCP, the term also includes enforcement activities related thereto.

**"Remove or removal"** as defined by Section 311(a)(8) of the Clean Water Act (CWA), refers to removal of oil or hazardous substances from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare or to the environment. As defined by Section 101(23) of CERCLA remove or removal means the cleanup or removal of released hazardous substances from the environment; such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances; the disposal of removed material; or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under Section 104(b) of CERCLA post-removal site control, where appropriate, and any emergency assistance which may be provided under the Disaster Relief Act of 1974. For the purpose of the NCP, the term also includes enforcement activities related thereto.

**"Respond or response"** as defined by Section 101(25) of CERCLA means remove, removal, remedy, or remedial action, including enforcement activities related thereto.

**"SARA"** is the Superfund Amendments and Reauthorization Act of 1986. In addition to certain free-standing provisions of law, it includes amendments to CERCLA the Solid Waste Disposal Act, and the Internal Revenue Code. Among the free-standing provisions of law is Title III of SARA also known as the "Emergency Planning and Community Right-to-Know Act of 1986" and Title IV of SARA also known as the "Radon Gas and Indoor Air Quality Research Act of 1986." Title V of SARA amending the Internal Revenue Code is also known as the "Superfund Revenue Act of 1986."

**"Site Inspection (SI)"** means an on-site investigation to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.

**"Size classes of releases"** refers to the following size classifications which are provided as guidance to the OSC for meeting pollution reporting requirements in Subpart B. The final determination of the appropriate classification of a release will be made by the OSC based on consideration of the particular release (e.g., size, location, impact, etc.):

(a) Minor release means a release of a quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses minimal threat to public health or welfare or the environment.

(b) Medium release means a release not meeting the criteria for classification as a minor or major release.

(c) Major release means a release of any quantity of hazardous substance(s), pollutant(s), or contaminant(s) that poses a substantial threat to public health or welfare or the environment or that results in significant public concern.

**"State"** means the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of Northern Marianas, and any other territory or possession over which the United States has jurisdiction. For purposes of the NCP, the term includes Indian tribes as defined in the NCP except where specifically noted. Section 126 of CERCLA provides that the governing body of an Indian tribe shall be afforded substantially the same treatment as a State with respect to certain provisions of CERCLA. Section

**"State"** (Cont.) 300.515(b) of the NCP describes the requirements pertaining to Indian tribes that wish to be treated as States.

**"Superfund Memorandum of Agreement (SMOA)"** means a nonbinding, written document executed by an EPA Regional Administrator and the head of a State agency that may establish the nature and extent of EPA and State interaction during the removal, pre-remedial, remedial, and/or enforcement response process. The SMOA is not a site-specific document although attachments may address specific sites. The SMOA generally defines the role and responsibilities of both the lead and the support agencies.

A Superfund State contract is a joint, legally binding agreement between EPA and a State to obtain the necessary assurances before a Federal-lead remedial action can begin" at a site. In the case of a political subdivision-lead remedial response, a three-party Superfund State contract among EPA, the State, and political subdivision thereof, is required before a political subdivision takes the lead for any phase of remedial response to ensure State involvement pursuant to Section 121(f)(l) of CERCLA. The Superfund State contract may be amended to provide the State's CERCLA Section 104 assurances before a political subdivision can take the lead for remedial action.

**"United States"** when used in relation to Section 31l(a)(5) of the Clean Water Act, means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, the United States Virgin Islands, and the Pacific Island Governments. United States, when used in relation to Section 101(27) of CERCLA includes the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Marianas, and any other territory or possession over which the United States has jurisdiction.

**"Vessel"** as defined by Section 101(28) of CERCLA means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water; and, as defined by section 311(a)(3) of the Clean Water Act, means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel.

Source: 40 CFR 300.5

**The Clean Air Act**
**(CAA)**

**"Act"** means the Clean Air Act (42 U.S.C. 1857 *et seq.,* as amended by Pub. L. 91-604, 84 Stat. 1676).

**"Administrator"** means the Administrator of the Environmental Protection Agency or his authorized representative.

**"Affected facility"** means, with reference to a stationary source, any apparatus to which a standard is applicable.

**"Alternative method"** means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.

**"Construction"** means fabrication, erection, or installation of an affected facility.

**"Continuous monitoring system"** means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

**"Equivalent method"** means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

**"Existing facility"** means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

**"Monitoring device"** means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

**"One-hour period"** means any 60-minute period commencing on the hour.

**"Opacity"** means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

**"Owner or operator"** means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

**"Particulate matter"** means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method.

**"Reference method"** means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

**"Volatile Organic Compound (VOC)"** means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.

Source: 40 CFR 60.2

**The Atomic Energy Act**
**(AEA)**

**"Atomic energy"** means all forms of energy released in the course of nuclear fission or nuclear transformation.

**"Byproduct material"** means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.

**"Commission"** means the Nuclear Regulatory Commission (NRC) or its duly authorized representatives.

**"Director" means** the Director of the Nuclear Regulatory Commission's Office of Nuclear Material Safety and Safeguards.

**"Disposal"** means the isolation of radioactive wastes from the accessible environment.

**"DOE"** means the U.S. Department of Energy or its duly authorized representatives.

**"Geologic repository operations area"** means a high-level radioactive waste facility that is part of a geologic repository, including both surface and subsurface areas, where waste handling activities are conducted.

**"Important to safety,"** with reference to structures, systems, and components, means those engineered structures, systems, and components essential to the prevention or mitigation of an accident that could result in a radiation dose to the whole body, or any organ, of 0.5 rem or greater at or beyond the nearest boundary of the unrestricted area at any time until the completion of permanent closure.

**"High-Level Radioactive Waste (HLW)"** means (1) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and (2) other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation.

**The Atomic Energy Act**
**(AEA) (Cont.)**

**"Person"** means--

(1) Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Commission or the Department of Energy (DOE), except that the DOE shall be considered a person within the meaning of the regulations in this part to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Commission pursuant to Section 202 of the Energy Reorganization Act of 1974, as amended (88 Stat. 1244), and Sections 131, 132, 133, 135, 137, and 141 of the Nuclear Waste Policy Act of 1982 (96 Stat. 2229, 2230, 2232, 2241);

(2) Any State, any political subdivision of a State, or any political entity within a State;

(3) Any foreign government or nation, or any political subdivision of any such government or nation, or other entity; and

(4) Any legal successor, representative, agent, or agency of the foregoing.

**"Radioactive waste"** or "waste" means High Level Radioactive Waste (HLW) and other radioactive materials other than HLW that are received for emplacement in a geologic repository.

**"Site"** means the real property on which the Interim Spent Fuel Storage Installation (ISFSI) or Monitored Retrievable Storage (MRS) is located.

**"Site"** means the location of the controlled area.

**"Source material"** means--

(1) Uranium, or thorium, or any combination thereof, in any physical or chemical form; or

(2) Ores which contain by weight one-twentieth of one percent (0.05%) or more of
   (a) Uranium,
   (b) Thorium, or
   (c) Any combination thereof.

Source material does not include special nuclear material.

**"Special nuclear material"** means--

(1) Plutonium, uranium-233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of Section 51 of the Act, determines to be special nuclear material, but does not include source material; or

(2) Any material artificially enriched by any of the foregoing but does not include source material.

**"Spent Nuclear Fuel"** or **"Spent Fuel"** means fuel that has been withdrawn from a nuclear reactor following irradiation, has undergone at least one year's decay since being used as a source of energy in a power reactor, and has not been chemically separated into its constituent elements by reprocessing. Spent fuel includes the special nuclear material, byproduct material, source material, and other radioactive materials associated with fuel assemblies.

**"Structures, systems, and components important to safety"** mean those features of the Interim Spent Fuel Storage Installation (ISFSI) or Monitored Retrievable Storage (MRS) whose function is:

(1) To maintain the conditions required to store spent fuel or high-level radioactive waste safely,

(2) To prevent damage to the spent fuel or the high-level radioactive waste container during handling and storage, or

(3) To provide reasonable assurance that spent fuel or high-level radioactive waste can be received, handled, packaged, stored, and retrieved without undue risk to the health and safety of the public.

**Source:** 10 CFR Parts 20.3, 60.2 and 72.3.

**Clean Water Act**
**(CWA)**

**"Act"** means the Federal Water Pollution Control Act, as amended, *33* U.S.C. 1251 et seq., also known as the Clean Water Act.

**"Administrator"** means the Administrator of the Environmental Protection Agency.

**"Discharge"** when used in relation to Section 311 of the Act, includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping, but excludes (A) discharges in compliance with a permit under Section 402 of the Act, (B) discharges resulting from circumstances identified and reviewed and made a part of the public record with respect to a permit issued or modified under Section 402 of the Act, and subject to a condition in such permit, and (C) continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under Section 402 of the Act, that are caused by events occurring within the scope of relevant operating or treatment systems.

**"Navigable waters"** means the waters of the United States, including the territorial seas. The term includes:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(b) Interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;

(3) That are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as navigable waters under this section;

(e) Tributaries of waters identified in Paragraphs (a) through (d) above, including adjacent wetlands; and

**"Navigable waters" (Cont.)**

(f) Wetlands adjacent to waters identified in Paragraphs(a) through (e) above: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States;

"NPDES" means National Pollutant Discharge Elimination System;

**"United States"** means the States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin islands, and the Trust Territory of the Pacific Islands.

**Source: 40** CFR 110.2

**The Safe Drinking Water Act**
**(SDWA)**

**"Administrator"** means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

**"Director"** means the Regional Administrator, the State director or the Tribal director as the context requires, or an authorized representative. When there is no approved state or Tribal program, and there is an EPA administered program, "Director" means the Regional Administrator. When there is an approved State or Tribal program, "Director" normally means the State or Tribal director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved State or Tribal program. In such cases, the term "Director" means the Regional Administrator and not the State or Tribal director.

**"Environmental Protection Agency (EPA)"** means the United States Environmental Protection Agency.

**"Facility or activity"** means any Underground Injection Control (UIC) injection well, or an other facility or activity that is subject to regulation under the UIC program.

**"Fluid"** means any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or State.

**"Hazardous waste"** means a hazardous waste as defined in 40 CFR 261.3.

**"Injection well"** means a well into which fluids are being injected.

**"Injection zone"** means a geological formation, group of formations, or part of a formation receiving fluids through a well.

**"Permit"** means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR 144, 145, 146 and 124. Permit includes an area permit (Sec. 144.33) and an emergency permit (Sec. 144.34). Permit does not include Underground Injection Control (UIC) authorization by rule (Sec. 144.21), or any permit which has not yet been the subject of final agency action, such as a "draft permit."

**"Person"** means an individual, association, partnership, corporation, municipality, State, Federal, or Tribal agency, or an agency or employee thereof.

**"SDWA"** means the Safe Drinking Water Act (Pub. L. 93-523, as amended; 42 U.S.C. 300f et seq.).

**"Site"** means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

**"State"** means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, or an Indian Tribe treated as a State.

**"UIC"** means the Underground Injection Control program under Part C of the Safe Drinking Water Act, including an approved State program.

**"Underground injection"** means a well injection.

"Underground **source of drinking water** (USDW)" means an aquifer or its portion:

(a) (1) Which supplies any public water system; or
(2) Which contains a sufficient quantity of ground water to supply a public water system; and
(i) Currently supplies drinking water for human consumption; or
(ii) Contains fewer than 10,000 mg/1 total dissolved solids; and
(b) Which is not an exempted aquifer.

**"USDW'** means underground source of drinking water.

**"Well"** means a bored, drilled, or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension.

**Source: 40** CFR Part 144.3

**The Toxic Substances Control Act**
**(TSCA)**

**"Act"** means the Toxic Substances Control Act, 15 U.S.C. 2601 et seq.

**"Annual"** means the corporate fiscal year.

**"Byproduct material," "source material," and "special nuclear material"** have the meanings contained in the Atomic Energy Act of 1954, 42 U.S.C. 2014 et seq. and the regulations issued under it.

**"Chemical substance"** means any organic or inorganic substance of a particular molecular identity, including any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature, and any chemical element or uncombined radical, except that chemical substance does not include:

(1) Any mixture,
**(2)** Any pesticide when manufactured, processed, or distributed in commerce for use as a pesticide,
**(3)** Tobacco or any tobacco product,
**(4)** Any source material, special nuclear material, or byproduct material,
**(5)** Any pistol, firearm, revolver, shells, or cartridges, or
**(6)** Any food, food additive, drug, cosmetic, or device, when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic, or device.

**"Commerce"** means trade, traffic, transportation, or other commerce (1) between a place in a State and any place outside of such State, or (2) which affects trade, traffic, transportation, or commerce between a place in a State and any place outside of such State.

**"EPA"** means the United States Environmental Protection Agency.

**"Manufacture or import for commercial purposes"** means:

(1) To import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer or importer, and includes, among other things, "manufacture" of any amount of a chemical substance or mixture:

**The Toxic Substances Control Act**
**(TSCA) (Cont.)**

**"Manufacture or import for commercial purposes" (Cont.)**

(i) For commercial distribution, including for test marketing, or

(ii) For use by the manufacturer, including use for product research and development or as an intermediate.

(2) The term also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including byproducts that are separated from that other substance or mixture and impurities that remain in that substance or mixture. Byproducts and impurities without separate commercial value are nonetheless produced for the purpose of obtaining a commercial advantage, since they are part of the manufacture of a chemical substance for commercial purposes.

**"Manufacturer"** means a person who imports, produces, or manufactures a chemical substance. A person who extracts a component chemical substance from a previously existing chemical substance or a complex combination of substances is a manufacturer of that component chemical substance. A person who contracts with a manufacturer to manufacture or produce a chemical substance is also a manufacturer if (1) the manufacturer manufactures or produces the substance exclusively for that person, and (2) that person specifies the identity of the substance and controls the total amount produced and the basic technology for the plant process.

**"Mixture"** means any combination of two or more chemical substances if the combination does not occur in nature and is not, in whole or in part, the result of a chemical reaction; except mixture does include:

(1) any combination which occurs, in whole or in part, as a result of a chemical reaction if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined, and if all of the chemical substances comprising the combination are not new chemical substances, and

(2) hydrates of a chemical substance or hydrated ions formed by association of a chemical substance with water, so long as the nonhydrated form is itself not a new chemical substance.

**"Person"** includes any individual, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity; any State or political subdivision thereof; any municipality; any interstate body; and any department, agency, or instrumentality of the Federal Government.

**"Pesticide"** has the meaning contained in the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136 et seq. and the regulations issued under it.

"Processor" means any person who processes a chemical substance or mixture.

**"Site"** means a contiguous property unit. Property divided only by a public right-of-way shall be considered one site. There may be more than one plant on a single site. The site for a person who imports a substance is the site of the operating unit within the person's organization which is directly responsible for importing the substance and which controls the import transaction and may in some cases be the organization's headquarters office in the United States.

**"Substance"** means either a chemical substance or mixture unless otherwise indicated.

**"TSCA"** means the Toxic Substances Control Act, 15 U.S.C. 2601 et seq.

**Source: 40** CFR Parts 704.3 and 720.3

## The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

**"Accident''means** an unexpected, undesirable event, caused by the use or presence of a pesticide, that adversely affects man or the environment.

**"Act''or "FIFRA"** means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 136 et seq.).

**"Administrator''** means the Administrator of the Environmental Protection Agency, or any office or employee of the Agency to whom authority has heretofore been delegated, or to whom authority may hereafter be delegated, to act in his stead.

**"Agency,"** unless otherwise specified, means the United States Environmental Protection Agency.

**"Certification"** means the recognition by a certifying agency that a person is competent and thus authorized to use or supervise the use of restricted-use pesticides.

**"Certified applicator"** means any individual who is certified to use or supervise the use of any restricted-use pesticides covered by his certification.

**"Manufacturing use product"** means any pesticide product that is not an end-use product.

**"Pesticide"** means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

(1) Isa new animal drug under Federal Food, Drug, and Cosmetic Act (FFDCA) Section 201(w), or

(2) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or

(3) Is an animal feed under FFDCA Section 201(x) that bears or contains any substances described by paragraphs (1) or (2) above.

**"Protective equipment"** means clothing or any other materials or devices that shield against unintended exposure to pesticides.

**Source: 40** CFR Part 152.3